
INCREASING PHYSICAL ACTIVITY

Building a supportive recreation and sport system



—a CFLRI project initiated in partnership with—

Fitness/Active Living Unit, Health Canada, and
the Interprovincial Sport and Recreation Council

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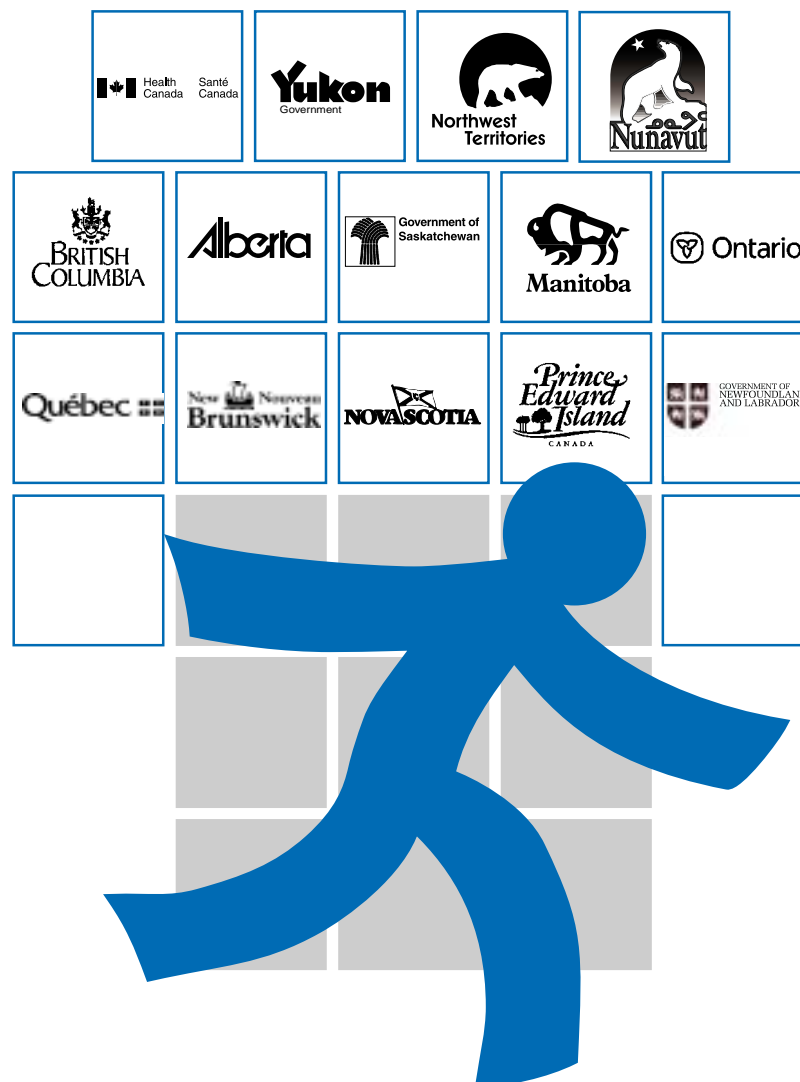


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Building a supportive recreation and sport system

Acknowledgments

The Canadian Fitness and Lifestyle Research Institute commends and thanks Health Canada and the Interprovincial Sport and Recreation Council for their partnership in and financial contribution toward the Physical Activity Benchmarks Program:





Our mission

A national research agency concerned with advising, educating and informing Canadians and professionals about the importance of leading healthy, active lifestyles, the Canadian Fitness and Lifestyle Research Institute is directed by a Board of Directors comprised of eminent scholars and professionals in the areas of public health, physical education, sport sciences, recreation and medicine, as well as universities and federal and provincial levels of governments.

By creating and communicating knowledge about physical activity, its determinants and its outcomes, the Institute provides the evidence required so that individuals, professionals and policy makers can take action in improving the lifestyles of Canadians. By doing so, the Institute improves the well-being and the quality of life of Canadians and contributes to resolving health, societal and economic issues facing Canada.

Established in September 1980, in recognition of the need identified by national organizations, federal and provincial governments, and Canadian universities, the Institute is the leader in bridging the gap between knowledge on physical activity and its use. As a primary source of knowledge and through its network of national and international scholars, the Institute provides a comprehensive range of services required for evidence-based decision making to governments at all levels as well as national and private-sector organizations.

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ISBN 1-895724-27-9

Suggested citation: Craig, C.L., Cameron, C., Russell, S.J., & Beaulieu, A. (2001). *Increasing physical activity: Building a supportive recreation and sport system*. Ottawa, ON: Canadian Fitness and Lifestyle Research Institute.

(The French edition—ISBN 1-895724-28-7—is entitled *Créer un système propice des sports et des loisirs pour accroître l'activité physique*.)

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Acknowledgments

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- Physical Activity Unit, Health Canada
- Newfoundland Department of Tourism, Culture and Recreation—Recreation and Sport Division
- Prince Edward Island Department of Community and Cultural Affairs—Culture, Heritage, Recreation, and Sport Division
- Nova Scotia Sport and Recreation Commission, Government of Nova Scotia
- New Brunswick Culture and Sport Secretariat—Sport, Recreation and Active Living Branch
- Kino-Québec, Secrétariat au loisir et au sport
- Ontario Ministry of Tourism, Culture and Recreation—Sport and Recreation Branch
- Manitoba Department of Culture, Heritage and Tourism—Recreation and Wellness Promotion Branch
- Saskatchewan Culture, Youth and Recreation—Sport and Recreation Branch
- Alberta Community Development—Sport and Recreation Branch and the Alberta Sport, Recreation, Parks and Wildlife Foundation
- British Columbia Ministry of Community, Aboriginal and Women’s Services—Sport and Community Capital Branch
- Yukon Department of Community and Transportation Services—Sport and Recreation Branch
- Northwest Territories Department of Municipal and Community Affairs—Community Development Division, Sport and Recreation Programs
- Nunavut Department of Community Government and Transportation—Sport Nunavut Division

The development of this report has benefited from the guidance and thoughtful input of the Physical Activity Benchmarks Advisory Committee, and the Institute wishes to express its heartfelt gratitude to the members who volunteered their time and expertise in reviewing the report.

INTRODUCTION

Background

Given the importance they attribute to physical inactivity as a major public health problem in Canada, governments at the federal, provincial, and territorial levels jointly adopted in 1997 the goal of reducing the physical inactivity levels of Canadians by 10% by the year 2003.¹ As a result, the Canadian Fitness and Lifestyle Research Institute has been mandated by the Interprovincial Sport and Recreation Council and the Fitness/Active Living Unit of Health Canada to monitor the physical activity behaviours of Canadians from 1998 to 2003 through its annual Physical Activity Monitor.

The 1999 Physical Activity Monitor results presented in this report show that, essentially, there has been no difference in physical activity levels since the 1998 baseline year. Data for the 1998 Physical Activity Monitor were published in the report entitled *Increasing physical activity: Creating effective communications*.² To foster a change in physical activity behaviour, a balanced approach to intervention is important: it must focus on both *individual* factors, such as a positive intention to modify behaviour and develop the skills to achieve the behaviour, and *environmental* factors, which support the behaviour and the intent to change.³ Levels of government and non-government in Canada are encouraging Canadians to become more active and providing supports to enable this behaviour change to occur.² It takes time for the impact of interventions to surface, however, and as a result we may only see the impact of these initiatives on physical activity levels over the next few years. In order to meet their goal, governments must tailor their initiatives to meet the needs of Canadians,⁴ help them overcome barriers, which are perceived as an impediment to physical activity, and commit to a long-term strategy to effect the desired changes.

Each year, the Physical Activity Monitor not only tracks the progression toward this 10% goal of reducing physical inactivity but also focuses on a different theme related to physical activity. The 1999 theme revolves around the direct and indirect role of the sport and recreation system in Canada in increasing and sustaining physical activity levels. Availability, access, and the quality of facilities, programs, and services available through the local sport and recreation system are key factors influencing the physical activity patterns of Canadians. This report will examine Canadians' perceptions of the current physical activity opportunities in their area. More specifically, this includes the access they have to different types of information on physical activity in their community, the effect of barriers for both adults and children related to physical activity opportunities in the community, mechanisms available for helping Canadians become more physically active, and the types of places, facilities, and opportunities available for physical activity.

As an adjunct to the Physical Activity Monitor, which focuses on individual Canadians, a separate study was conducted by the Institute in 2000–2001 to assess the capacity of the sport and recreation system to support physical activity. This capacity study, also a component of the Physical Activity Benchmarks Program, involves a sample of all Canadian municipalities. It examines the capacity of the municipal sport and recreation

system and infrastructure for providing access to facilities, programs, services, and other opportunities to be active that are available in Canadian communities. Data from this survey will be available on the Institute's Web site later this year.

Scope of the report

This report provides an overview of survey data from the 1999 Physical Activity Monitor. The analyses are descriptive: they describe associations between factors that should not be construed as causal relationships. Any statements implying causality or attribution of effects to physical activity level are based on the cited scholarly literature. In addition to highlighting differences among physical activity levels, the current analysis focuses on age, sex, and regional differences within topics. Statistics on the influence of other factors (e.g., education, income, employment status, community size, and family composition) are provided in the detailed tables in Appendix A.

Survey sample and methods

The Physical Activity Monitor is an annual telephone-interview survey of a random sample of Canadians. Findings in this report are based on a 1999 sample of 4,369 Canadians. A sample of roughly 250 adults was selected within each of the provinces and territories, with additional sample in New Brunswick, Ontario, Quebec, Manitoba, and the Northwest Territories. Data were collected via computer-assisted telephone interviews with a randomly selected individual aged 18 or older within the household. Parents also answered questions about one of their children under 18 who were still living at home. Further detail about the sampling and interview procedures is included in Appendix B.

Structure of the report

The report provides a synopsis of the current situation in Canada that is relevant to policy and decision-makers in designing initiatives to reduce physical inactivity among Canadians.

The findings are presented and discussed in six sections:

Highlights—a summary of key findings and their implications for advancing the public agenda and designing relevant strategies.

The current situation—level of inactivity and popular activities for adults and children, and awareness of physical activity guidelines among adults, by age, sex, region, and province.

Availability of physical activity information in the community—access to information on physical activity, including the amount of information available, the type of information, and where people obtain the information, by age, sex, region, province, and physical activity level.

Local opportunities to be active—facilities and services available in the community, including walking trails, bicycling trails, recreation trails, designated physical activity facilities, non-designated facilities, and support services, by age, sex, region, province, and physical activity level.

Systemic barriers to physical activity—Canadians’ perceptions of barriers related to the local sport and recreation system, including cost, program availability, maintenance of facilities, lack of information, convenience, skill level, social support, and safety, by age, sex, region, province, and physical activity level. Information on barriers is available for adults and for children through parental responses.

Potential tactics to increase participation—Canadian adults’ perceptions of what would help them become more active, including the provision of incentives, reduction of costs, more information, a greater variety of activities, increased social support, a more supportive infrastructure, by age, sex, region, province, and physical activity level. Similar information will be available through parental proxy data for children.

Making a difference—considerations for developing initiatives with particular emphasis on creating more supportive environments and, in particular, the role of the sport and recreation system in Canada.



HIGHLIGHTS



Key findings

Physical inactivity levels have not changed during the latter part of the 1990s.

- 64% of adults aged 18 and older are still considered insufficiently active for optimal health benefits, compared with 79% in 1981.
- Physical inactivity rates are consistent across all regions of Canada, with the exception of the territories, where inactivity levels are lower, and Quebec, where they are higher than in Canada overall.
- More women than men are inactive.
- The most popular activity of Canadians are walking (81%), gardening, yard work (70%), swimming (54%), social dancing (46%), home exercise (45%), and bicycling (45%).
- Over half of Canadian children and youth aged 5–17 are not active enough for optimal growth and development
- Girls are less active than boys.

The majority of Canadians have access to physical activity information in their communities.

- Two-thirds of Canadian adults report that there is a lot of information on physical activity and sports available in their community.
- 64% state that it is easy to get this type of information and a further 24% say it is somewhat easy.
- Two out of five Canadians have personally received information during the last three months about sports or physical activity programs and services in their community, or have spoken to someone about becoming or remaining active. Of these individuals, only 14% had sought this information out themselves, 49% report that the information was offered to them by someone else, and 37% received the information both ways.
- 57% of adults receive information on physical activity or sports through the media, including newspapers, television, and radio. In addition, 18% of adults receive physical activity information from an organized course, lecture, or workshop, and 10% receive information through the Internet.
- Half of Canadians obtain information on physical activity and sports at a facility designated specifically for recreation and sports, and 43% indicate receiving this information at a community centre, a school, or another facility not specifically designed for physical activity. One in four adults receive such information at a shopping mall, on the street, or in some other type of public place. Notably, only 13%

of individuals gather this type of information from a medical facility, such as a doctor's office, a clinic, or another type of health care facility.

- 55% of adults who have received information on physical activity or sports received this information from friends or family members. Only 7% of individuals who received information did so from a church member, public figure, or other prominent member of their community.
- 88% of adults received information on where to go to be active in their local community; 86% obtained information on the kinds of physical activity or sports facilities, programs, and services available in their community; 70% received information on how to become more active in daily life; 68% obtained information on how to improve physical activity or sport skills; and 60% received information on why they should be active.
- Among Canadians who obtained information on physical activity, two-thirds believe that they are active regularly, 32% occasionally, and 3% not at all. Just over half of participants say that the information they received during the past year has led them to think about being more active. Moreover, 65% report that the information helped them become more active, and 35% claim that it had no influence at all.

While opportunities for physical activity abound, they are not universal.

Walking trails

- Two-thirds of Canadians report that there are many places in their communities where they can safely walk, such as sidewalks, paths, and walking trails.
- Nine in ten Canadians make use of these opportunities, with half doing so frequently. As many as 82% of adults believe that it is very important to have safe places to walk in their communities.
- One in four adults report that they would walk more often if there were more safe places to walk.

Bicycling paths, trails, and lanes

- One-third of Canadian adults report that there are many places in their communities where they can safely ride a bicycle, including designated bicycle lanes, paths, or trails set aside for riding bicycles.
- Less than one-quarter of adults frequently use this infrastructure
- 67% believe that the availability of places to ride a bicycle in their communities is very important.
- 40% say that they would bicycle more often if there were more safe places to bicycle in their communities

Willingness to bicycle on various types of routes

- 88% of adults say they are very willing to ride a bicycle on roads with a completely separate bicycle lane and no vehicle traffic.
- 57% report being very willing to ride on a multi-use trail where there is no vehicle traffic but where other people can use the trail for hiking or other activities.
- 51% are very willing to ride in a lane designated for cyclists only on roads with vehicle traffic.
- 11% are very willing to ride a bicycle on roads with vehicle traffic and without a designated bicycle lane.

Recreation trails

- Just over one-quarter of adults report that there are many multi-purpose trails in their communities that can be used for different physical activities or sports (e.g., bicycling, hiking, cross-country skiing).
- 18% frequently use these types of trails to do physical activity, and 55% use them sometimes.
- Over half of adults think multi-purpose trails are very important for being active.
- One-third state that they would be active more often if there were more multi-purpose trails in their communities.

Designated facilities

- Roughly two out of five Canadians report that there are many facilities, places, and programs in their communities designed specifically for physical activity and sport—such as fitness centres, pools, arenas, and tennis courts.
- 16% of adults use these types of facilities and programs frequently, and 45% use them sometimes.
- Half of adults think that it is very important to have such opportunities available in their communities.
- 28% say that they would be active more often if more of these types of opportunities were available.

Non-designated places

- One-quarter of Canadians report that there are many other types of places in their communities that are not specifically designed to increase participation among the general public but where they can be active—including school gyms used after hours, places at work where people can be active, community centres used for exercise, or public places where youth can skateboard.

- 6% use these places frequently, a further 37% use them sometimes, and 56% never use them.
- Almost half of adults think that it is very important to have places like this in their communities.
- 21% state that they would be active more often if there were more of these places.

Support services

- Fewer than one in five Canadians report that there are many other kinds of support services available in their communities to help them be active, whether information or advice on how to be active, links to places where specific instruction or coaching can be obtained, or access to child care while participating in physical activity.
- 4% frequently use such services, 31% use them sometimes, and 66% never use them. About one-third of adults believe that it is very important and 48% believe it is somewhat important that these kinds of support services be available to help them be active.
- 20% state that they would be active more often if there were more of these types of services available.

Systemic barriers to physical activity programs, services, and facilities are varied and diverse.

Convenience

- Almost one-quarter of Canadian adults strongly agree that the hours and class times offered by their local centres do not suit them.
- 14% of adults strongly agree that it is too hard to get to places where they can be active.
- 16% of Canadian parents strongly agree that the hours and class times offered by their local centres do not suit the needs of their children.
- 19% of parents strongly agree that it is too hard to get to places where their children can be active.

Program availability

- 17% of Canadians strongly agree that there are not enough physical activity programs, services, or facilities in and around their local community.
- One in five adults strongly agree that the programs and facilities available are not the right type for them.

- Almost one-quarter of parents strongly agree that there are not enough programs, services, or facilities in and around their local communities that offer opportunities for their children to be active.
- Roughly one in five parents strongly agree that the programs and facilities available are not the right types for their children.

Information about programming

- 17% of adults strongly agree that there is not enough information on local physical activity and sport opportunities, although the majority of adults find that there is a lot.
- 12% of adults strongly agree that they lack awareness of how to build physical activity into their daily lives.
- One in ten parents strongly agree that there is not enough information on local physical activity and sport opportunities available for children.

Cost

- One-quarter of Canadian adults strongly agree that the dollar costs of doing physical activity are too high for them.
- One-quarter of Canadian parents strongly agree that the dollar costs associated with their children doing physical activity are too high.

Maintenance of facilities

- 12% of adults strongly agree that trails and parks are not well maintained in their community.
- 11% of Canadians strongly agree that sport and recreation facilities are not well maintained in their community.

Social support

- Almost one-quarter of Canadians strongly agree that it is too hard to find other people to be active with.
- One in five adults strongly agree that there are not enough places where they can be active and bring their children along.
- 17% of adults strongly agree that it is too hard to find the right type of coaching or instruction.
- One-quarter of Canadian parents strongly agree that there are not enough places where a family can be active together.
- 17% of parents strongly agree that it is too difficult to find the right type of coaching or instruction for their children.

- 15% of parents strongly agree that it is too difficult to find partners for their children to be active with.

Skill and ability

- 17% of Canadian adults strongly agree that they are not good at doing sports and physical activity.
- 13% of Canadian parents strongly agree that their children are not good at sports and physical activity.

Safety

- 15% of Canadian adults strongly agree that safety concerns keep them from walking or bicycling.
- 62% of adults strongly disagree that safety concerns keep them from walking and bicycling. Those who do find safety an issue cite many factors that prevent safe walking and bicycling in their neighbourhoods: 34% strongly agree that there is too much traffic, 20% strongly agree that there is too much crime on the streets, 24% strongly agree that there are badly maintained sidewalks and bike lanes, and 27% strongly agree that there are poorly lit sidewalks and streets.
- The majority (65%) of parents strongly disagree that safety concerns keep their children from walking and bicycling. Nevertheless, 13% of Canadian parents strongly agree that safety concerns keep their children from these activities.
- Of those parents concerned with safety issues, 22% strongly agree that sidewalks and bike lanes are not properly maintained, and 21% strongly agree that sidewalks and streets are poorly lit.

Many tactics would help Canadians and their children to be active.

Provide incentives

- About one in five adults strongly agree that the provision of incentives—such as certificates for attendance or completion of programs—or the provision of rewards for people who walk or bicycle a lot would help them become more active.
- Roughly one-third of parents strongly agree that the provision of incentives or rewards for being active would help their children become more active.

Reduce costs

- Half of Canadians strongly agree that if their workplace provided employee subsidies for health or fitness memberships, it would help them become more active.
- Roughly two in five adults strongly agree that dropping or reducing user fees at places like arenas or swimming pools would help them become more active.

- 28% strongly agree that providing affordable instruction and coaching on how to do different sports and physical activity would help.
- Two out of five parents strongly agree that the provision of subsidized fitness club memberships by communities would help their children become more active.
- 35% of parents strongly agree that dropping or reducing user fees at places like arenas or swimming pools would help their children become more active.
- 37% of parents strongly agree that providing affordable instruction and coaching on how to do different sports and physical activity would help their children be more active.

Provide information

- One-third of Canadians strongly agree that the provision of a toll-free (1-800) number, which they can call to obtain information on local activities, child care services, and so on, would help them be more active.
- 17% of adults strongly agree that the provision of more information about physical activity through the media and over the Internet would help them be more active.
- Almost one-third of Canadian parents strongly agree that the provision of a toll-free (1-800) number, through which they can obtain information on local activities and support services, would help their children be more active.
- One in five parents strongly agree that the provision of more information about physical activity through the media and over the Internet would help their children be more active.

Provide a variety of activities

- One-third of Canadian adults strongly agree that the provision of a wide variety of activity programs, facilities, and places to be active would help them become more active.
- 27% strongly agree that the provision of more opportunities for them to try out different activities would encourage their participation.
- Just over one-third of parents strongly agree that the provision of a wide variety of activity programs, facilities, and places to be active would help their children's physical activity routine.
- 62% of parents strongly agree that the provision of daily physical education by schools would help their children become more active.
- Just over half of parents strongly agree that the provision of more opportunities at school to participate in different activities would help their children be more active.

Increase social support

- 31% strongly agree that if communities provided outreach programs to help people be active at home, work, or school, it would help them to be more active.
- 28% strongly agree that the provision of services that link people up with other people who want to be active would help them be more active.
- 29% strongly agree that if there were more family-oriented programs and classes, it would help them become more active.
- 31% of parents strongly agree that if communities provided outreach programs to help children be active at home or at school, it would help their children to be more active.
- 34% of parents strongly agree that the provision of services that link children up with other children who want to be active would help.
- 37% of parents strongly agree that more family-oriented programs and classes would help their children become more active.

Provide a supportive infrastructure

- More than two in five adults strongly agree that if their community maintained a well-linked network of trails and paths, it would help them become more active.
- Just over one-quarter strongly agree that supportive facilities—such as showers, bicycle racks, and lockers at schools, workplaces, and community centres—would help them be more active.
- 17% agree strongly that the provision of ski racks, bicycle carriers, and such on buses and other public transportation would help them be more active.
- One-third of parents strongly agree that the maintenance of a well-linked network of trails and paths by the community would help their children to be more active.
- One-quarter of parents strongly agree that supportive facilities—such as showers, bicycle racks, and lockers at schools, workplaces, and community centres—would help their children be more active.
- One-fifth of parents agree strongly that the provision of ski racks, bicycle carriers, and such on buses and other public transportation would contribute to their children's regular physical activity regime.

Promote participation

- 44% of parents strongly agree that emphasizing participation in physical activity programs instead of winning competitions would help their children become more active.

- 48% of parents believe strongly that activity programs that teach children to respect each other and to play fairly would help their children become more active.

Implications

The sport and recreation system in Canada should offer a variety of programming, services, and facilities to accommodate the needs of all Canadians.

The sport and recreation system plays a significant role in the provision of the many and varied opportunities for being active in Canada. However, access to these opportunities may be limited in certain parts of the country. The system can optimize its impact by promoting the benefits of physical activity and practical means of overcoming commonly reported barriers, accommodating personal preferences, skills, and choices, and providing information on where physical activity can be done and available opportunities. The 1999 Physical Activity Monitor reveals that Canadians believe that the provision of a wide variety of activity programs, facilities and places to be active, and more opportunities for them to try out different activities is an important contributor to their physical activity behaviour. Parents also hold similar views for their children's physical activity patterns.

Given this, the sport and recreation system should

1. encourage a variety of physical activities;
2. provide a range of structured and unstructured as well as competitive and non-competitive physical activities to support individuals of varying skills and abilities;
3. provide a variety of opportunities in programming, services, and facilities that are family-oriented, group-oriented, and individual-based.
4. ensure a variety of facilities in the community that are convenient, safe, and accessible.

The sport and recreation system could be more supportive of Canadians' physical activity behaviour.

A balanced approach to behaviour change includes both individual and environmental components. The sport and recreation system has the potential to reach all Canadians through the provision of local programs, facilities, and infrastructure. Its current impact could be increased if municipalities were to investigate the applicability of systemic barriers to participation reported by Canadians to their local situation and implement strategies to overcome them. Systemic barriers include

- inconvenient scheduling,
- lack of programming focusing on the current needs of clients,
- insufficient promotion of local opportunities,
- excessive cost,

- poor maintenance of facilities,
- lack of family-oriented opportunities and social support,
- inadequate networking of paths and trails.

The sport and recreation system, in partnership with other key players, should strive to create a more supportive local environment for physical activity.

Efforts to increase physical activity do not reside in one sector alone. Rather, it is important to establish an integrated system, involving all key sectors in the life of Canadians. For Canadians to incorporate physical activity into their daily lives, they need to find physical activity opportunities at every turn, whether in their community, at work, at school, at church, and so on.

To increase physical activity, consider

- building the case for physical activity to elicit partnerships with key sectors, such as workplaces, schools, communities, and the health care sector;
- partnering with other municipal organizations to create common infrastructure solutions;
- developing and implementing recreational opportunities in conjunction with sectors such as the workplace and the school system.



THE CURRENT SITUATION



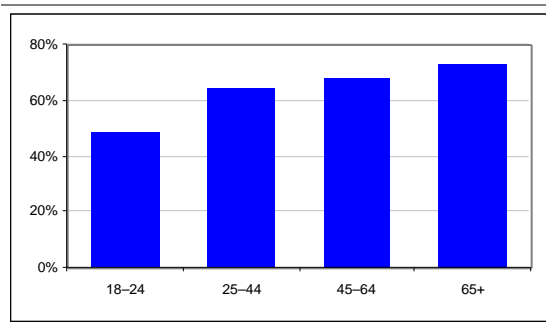
Physical inactivity levels of adults

Physical inactivity levels in Canada have not changed during the latter part of the nineties,^{5,6,2} with two-thirds of Canadians still not active enough to achieve desired health benefits. This is a major public health concern. What do we mean by not active enough? Inactivity is defined as expending fewer than three kilocalories per kilogram of body weight daily (KKD), or roughly equivalent to walking an hour a day. These results are consistent across all regions of Canada, with the notable exception of the territories where inactivity levels are lower and Quebec where they are higher than in Canada as a whole.

Age and sex As Canadians get older, their activity levels decrease. Sex-related differences are most apparent among young adults aged 18–24, where 60% of women are insufficiently active compared with only 36% of men. A considerable gap is also evident among adults aged 65 and older, where 79% of women versus 64% of men are not active enough.

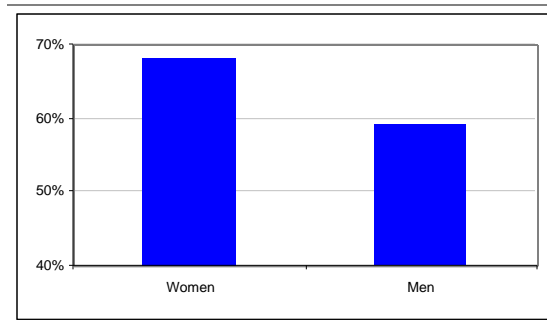
Implications The lack of change in population inactivity levels during the mid-to-late 1990s may be associated, at least in part, with a period when governments were reducing spending in promoting physical activity. Governments have only begun reinvesting in initiatives to reduce population physical inactivity during the last couple of years. It is also important to interpret the Canadian findings in a more global context, in particular with trends in the United States, our nearest neighbour. Indeed, the Surgeon General's report on physical activity⁷ summarizes well the issue of stalled progress in leisure-time physical activity participation in that country over the past two decades. Results from United States research, including the National Health Interview Survey and the Behavioral Factor Risk Surveillance System, show negligible change in participation rates from the mid-1980s to the early 1990s in the United States. In contrast, inactivity levels in Canada fell steadily throughout the 1980s and the early part of the 1990s, stalling only during the latter part of the 1990s. In the wake of findings such as these, both Canadian and American authorities have now stepped up efforts to address this major public health risk factor with decisively focused strategies for reducing the current, dangerously high levels of population inactivity. The results of such initiatives may become apparent over the next several years.

**PHYSICAL INACTIVITY OF CANADIANS
by age**



1999 Physical Activity Monitor, CFLRI

**PHYSICAL INACTIVITY OF CANADIANS
by sex**



1999 Physical Activity Monitor, CFLRI

Popular physical activities for adults

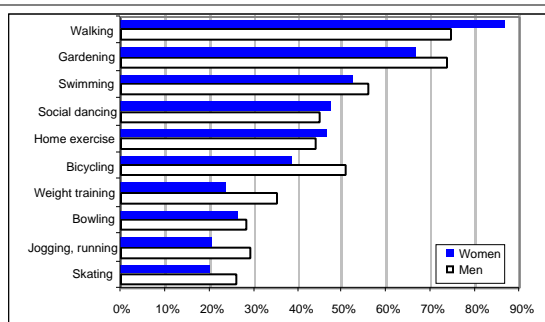
Walking remains the most popular physical activity, cited by 81% of adults as an activity they did during the past 12 months. It is followed by gardening, reported by 70%, and swimming, reported by 54%. Just under half of adults report participating in social dancing, home exercise, and bicycling. Roughly one-quarter report participation in weight training, bowling, jogging, and skating. Fewer than one in five adults state that they participated in baseball or softball, exercise classes, in-line skating, basketball, alpine skiing, volleyball, badminton, soccer, tennis, cross-country skiing, or hockey.

Age and sex Women are more likely than men to participate in exercise classes, to walk for exercise, and to take part in yoga or tai chi. Men are more likely than women to report activities including hockey, baseball or softball, soccer, bicycling, weight training, basketball, football, jogging, gardening, tennis, skating, and alpine skiing. Walking is cited as the most popular activity by all age groups. As one would expect, participation in moderate-to-vigorous types of activities generally decreases with age.

Activity level Active Canadians are more likely than less active Canadians to report participation in all activities. The difference between these two groups is most evident for participation in weight training, jogging, bicycling, and social dancing.

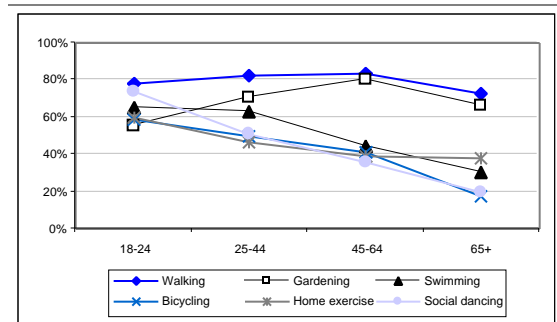
Implications While the most popular activities appear to be unstructured and low-cost, it is important to offer a variety of activities ranging from incidental activity in daily routines to structured, competitive activities. A challenge for the sports and recreation system is to promote specific physical activities to segments of the population who have historically demonstrated lower participation in physical activity. For example, older adults might be encouraged to take part in activities of various degrees of physical effort if the positive benefits and social aspects of physical activity are emphasized (as in mall walking and aquasize). Likewise, women will be more active if facilities, programs, and services address common barriers (by incorporating child care facilities, for instance), provide convenient class times (early in the morning, at lunch time, right after traditional work hours, or later in the evening), provide family-oriented programming and practical, accessible information on how to incorporate physical activity into everyday life.

**POPULAR PHYSICAL ACTIVITIES
by sex**



1999 Physical Activity Monitor, CFLRI

**POPULAR PHYSICAL ACTIVITIES
by age**



1999 Physical Activity Monitor, CFLRI

Awareness of guidelines for physical activity

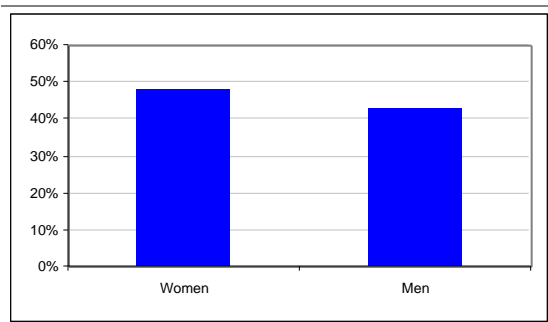
The 1999 Physical Activity Monitor examined (1) Canadians' awareness of physical activity guidelines for adults and (2) their understanding of the messaging contained in these guidelines. Almost half of Canadians are aware of some guidelines for physical activity. Adults in Ontario and the Yukon are more likely, and those in Quebec are less likely, than Canadians overall to report awareness of such guidelines. Furthermore, Canadian adults appear to understand key messages contained in *Canada's Physical Activity Guide for Healthy Active Living*.⁸ First, 89% agree more with the statement that "activities of moderate effort would improve health if done long enough" than with the statement that "only activities requiring vigorous effort will improve health." Second, 92% agree more with the statement that for health, "the more activity you do the better, but some is better than none" than with the statement that "you only have to do a small amount of physical activity occasionally." Finally, 83% are more in agreement that "people aren't active because they *think* it is too hard to get started, but it isn't" than with the statement that "people aren't active because it is too hard to get started."

Age and sex Women are more likely than men to be aware of guidelines for physical activity. With respect to the specific messages, women are more likely than men to agree that activities of moderate effort would improve health. Young adults (aged 18–24) are less likely to know of guidelines for activity than older age groups.

Activity level Less active adults are more likely than active adults to believe that people are not active because it is too hard to get started.

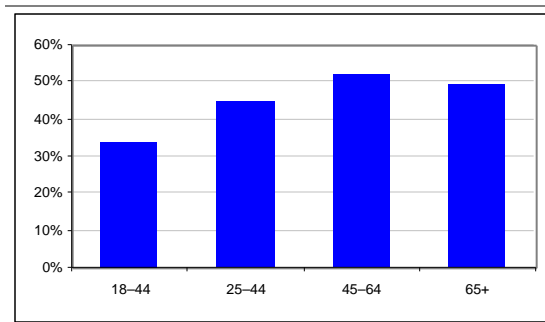
Implications The number of Canadians who are aware of and understand key messages contained in current national guidelines for physical activity has changed little between 1998² and 1999. The fact that Canadians appear to have a general understanding of key Guide messages is a good sign. Nonetheless, previous research reveals that not all Canadians understand how frequently people should be active and what is meant by terms such as moderate intensity.² It is therefore essential that policy-makers, programmers, and service providers clearly align Canadians' perception of physical activity guidelines with actual guidelines regarding frequency, intensity, and duration.

AWARENESS OF GUIDELINES
by sex



1999 Physical Activity Monitor, CFLRI

AWARENESS OF GUIDELINES
by age



1999 Physical Activity Monitor, CFLRI

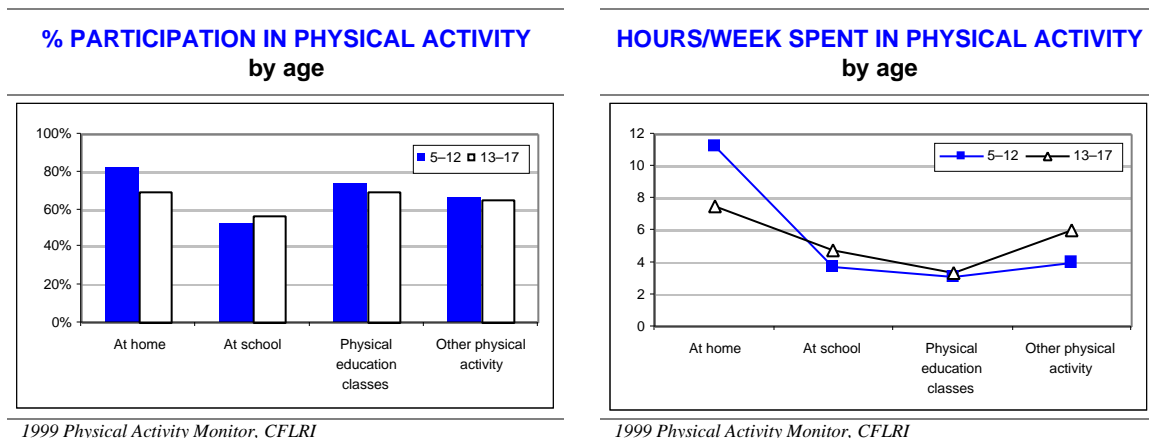
Time spent in physical activity by children and youth

Early childhood Preschool children, aged 1–4, reportedly spend 28 hours in physically active play and 18 hours in quiet play (e.g., watching videos, colouring) each week. This is equivalent to roughly seven hours of physical activity during play per day. Boys reportedly spend about two hours more on physically active play every week than do girls.

Childhood Parents report that 5–12 year-olds spend a total of 16 hours a week on physical activity. Physical activity around the home is the most frequently reported, with 11 hours a week of physical activity occurring there. Three out of four children (73%) take physical education classes at school, spending roughly three hours weekly in such classes. Half of children this age spend time in other physical activity at school, for an additional four hours of activity each week. The remaining time is spent in other physical activity outside of home and school.

Adolescence Parents report a total time of 14 hours a week on physical activity for adolescents aged 13–17. As for 5–12 year-olds, home is the most reported location for physical activity, with almost eight hours of activity occurring there. In addition, 69% of teenagers reportedly take part in physical education classes, which take up an average of three hours a week, and 56% spend time in other physical activities at school, for almost five hours a week. As many as 65% of adolescents engage in physical activity outside of school and home, for an average of six hours each week.

Implications Children and youth spend most of their physical activity time in their home environment, although the actual time spent in this location is less for adolescents than it is for younger children. Reported time spent in physical activity may be an overestimate, since it may include time spent changing or receiving instruction from coaches. Therefore, health policies, communities, schools, and recreation service providers should support parents by providing information on how to promote physical activity among their children, such as the types of activities that children (or youth) and parents can do together, how to become good role models for their children, and how to provide a positive environment at home, one that encourages physical activity and deters inactive behaviours like sitting in front of the television, computer, or video games.⁹

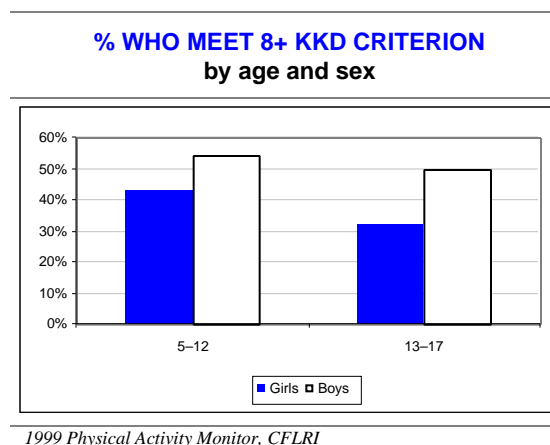
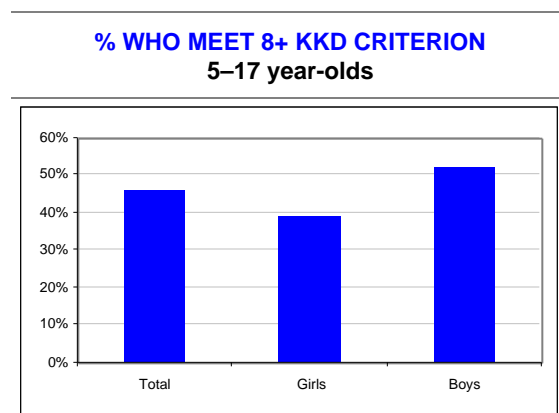


Physical activity levels among children and youth

Over half of Canadian children and youth aged 5–17 are not active enough for optimal growth and development. For the purposes of this analysis, the term *active enough* is equivalent to an energy expenditure of at least eight kilocalories per kilogram of body weight per day (KKD).¹⁰ For example, a half hour of martial arts plus walking for a total of at least one hour throughout the day would be sufficient activity.

Age and sex Girls are less active than boys, with 39% of girls and 52% of boys being considered active enough for optimal health benefits. This sex difference appears in both grade-school children and teenagers. For children aged 5–12, 43% of girls versus 54% of boys are considered active enough. Similarly, 32% of adolescent girls and 50% of adolescent boys are considered sufficiently active.

Implications The 1999 Physical Activity Monitor shows an increase in children’s physical activity levels from the previous year, when only 39% of children and youth aged 5–17 were considered active enough,² compared with 46% in 1999. This is a promising sign, but before this type of increase can be attributed to an actual change in the physical activity behaviour of children and youth—rather than an anomaly due to other circumstantial reasons, such as weather, random fluctuation, etc.—it is necessary to see this type of change persist for at least another year. Service providers should pay particular attention to the needs of adolescent girls when implementing their physical activity strategies, as this segment continues to show the lowest activity level. Programs can include a wide variety of activities, using the most popular activities for this age and sex group as a basis. Whereas parents play an important role in encouraging and forming active behaviour during childhood, friends and peers play a key role in reinforcing this type of behaviour during adolescence.¹¹ It may therefore be necessary to target the peer culture and provide activities that teenage girls can enjoy with their friends, free from the pressures of grades and competition.



Popular physical activities for children and youth

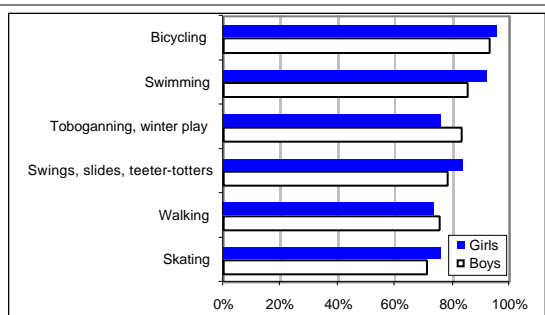
Early childhood Playing on swings, slides, and teeter-totters is the most popular physical activity among children aged 1–4, as reported by virtually all parents (96%). Roughly three-quarters of preschoolers participate in tobogganing or other winter activities, and in running or kicking games. Swimming ranks in fourth place at 63%, followed by bicycling (61%), gymnastics or Kiddy gym (45%), then skating (25%). Boys aged 1–4 are more likely than girls of the same age to participate in running and kicking games and swimming.

Childhood Bicycling is the most reported physical activity among children aged 5–12, followed by swimming, tobogganing or other winter activities, then playing on swings, slides, and teeter-totters. The next most popular activities in this age group are walking, skating, in-line skating, soccer, running or jogging, basketball, and baseball or softball. Boys aged 5–12 are more likely than girls of the same age to play golf, in-line skate, snowboard, skateboard, and participate in team sports such as soccer, football, or baseball. However, more girls than boys participate in social dancing and in ballet or other dance classes.

Adolescence Generally, the activities that are most popular among children aged 5–12 remain popular among adolescents, although the proportion of teenagers participating in each activity is usually lower. Nevertheless, a number of activities are more popular among teenagers than among younger children: alpine skiing, weight training, volleyball, social dancing, badminton, golf, basketball, exercise classes, and snowboarding. Teenage girls are more likely than teenage boys to participate in walking, social dancing, exercise classes or aerobics, and ballet or other dance classes. On the other hand, teenage boys are more likely than teenage girls to engage in bicycling, skating, badminton, golf, snowboarding, skateboarding, weight training, and some team sports.

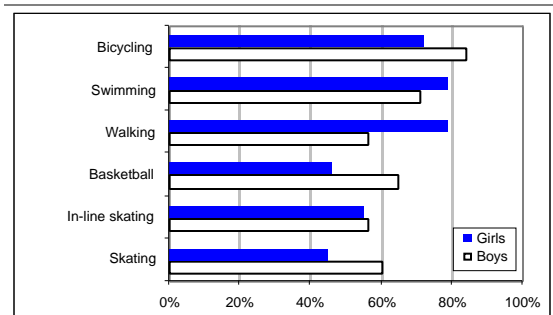
Implications Research on the physical activity levels of preschool children has shown that although children are physically active during the day, the majority of their time is spent in low-intensity activity.¹² Preschools, day care institutions, and communities could include programs of unstructured play, as this type of play is a good opportunity for incorporating sufficient activity into young children’s lives and is in many cases higher in intensity than more structured opportunities.¹³ For older children and youth, schools, municipalities, and community groups could offer a wide variety of activities during and after school that appeal to children of all skill and development levels, including both structured versus unstructured and competitive versus non-competitive physical activities.¹⁴

POPULAR PHYSICAL ACTIVITIES
5–12 year-olds



1999 Physical Activity Monitor, CFLRI

POPULAR PHYSICAL ACTIVITIES
13–17 year-olds



1999 Physical Activity Monitor, CFLRI



AVAILABILITY OF PHYSICAL ACTIVITY INFORMATION IN THE COMMUNITY



Accessibility of information on physical activity

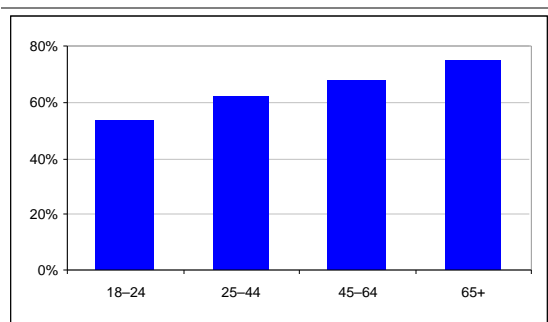
Two-thirds of Canadian adults report that there is a lot of information on physical activity and sports available in their community. A further 30% cite limited information and only 3% say there is none at all. Furthermore, 64% state that it is easy to get this type of information and a further 24% say it is somewhat easy. Only 12% feel that it is either hard or somewhat hard to obtain this type of information. Residents of the Atlantic region and Quebec are less likely and adults in the Yukon are more likely than Canadians overall to report an abundance of this type of information in their community. Finally, individuals in Newfoundland and New Brunswick are less likely and those in Alberta and the Yukon are more likely to report that it is easy to obtain this type of information.

Age and sex Women and men report similar availability of information and ease of access to this information. Adults in older age groups are much more likely to report that it is easy to obtain this information: whereas 53% of 18–24 year-olds feel it is easy, as many as 75% of adults over 65 feel the same way.

Activity level Active Canadians are slightly more likely than less active Canadians to state that there is a lot of information available on physical activity and that it is easy to obtain.

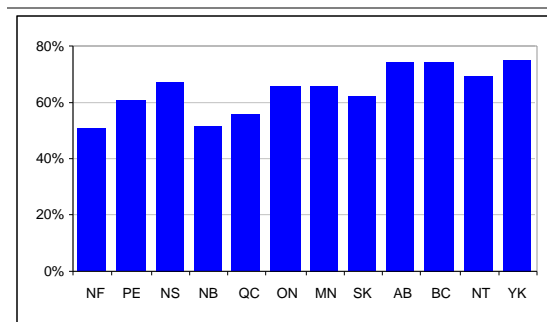
Implications As detailed in a recently released report detailing data from the 1998 Physical Activity Monitor,² a key ingredient in an effective social marketing campaign to change physical activity patterns is information that increases knowledge and awareness. Since Canadians appear to have a reasonably high level of awareness of the need and benefits of participation, they are more likely to require information on how to take steps to become more active and on local opportunities for being active. The findings reported above indicate that information on physical activity and sports is readily available in most communities. Data on the type of information received will be discussed in upcoming topics.

EASE OF GETTING INFORMATION
by age



1999 Physical Activity Monitor, CFLRI

EASE OF GETTING INFORMATION
by province



1999 Physical Activity Monitor, CFLRI

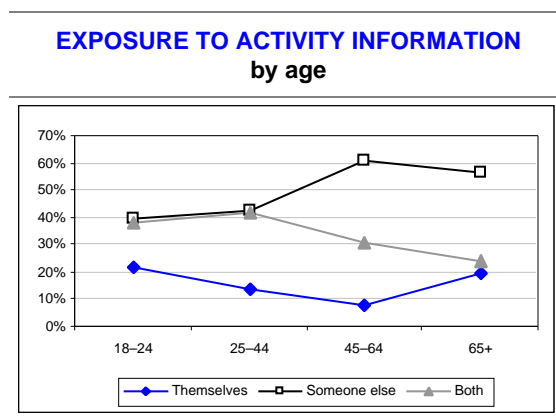
Exposure to physical activity information

Only two out of five Canadians have personally received information during the last three months about sports or physical activity programs and services in their community, or have spoken to someone about becoming or remaining active. Of these individuals, only 14% had sought this information out themselves, 49% report that the information was offered to them by someone else, and 37% received the information both ways. Residents of the Eastern region of Canada are less likely and those in the Western region and territories are more likely than Canadians generally to receive information on physical activity.

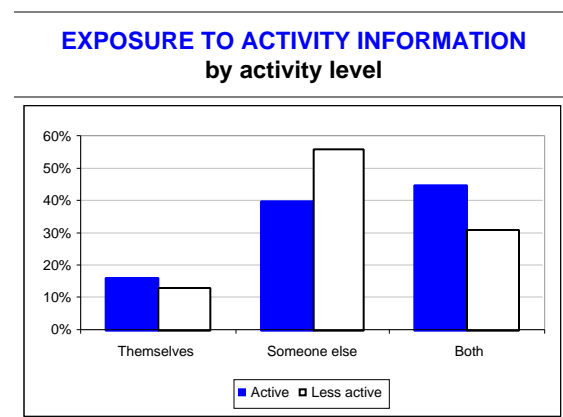
Age and sex Women are more likely than men to have received information concerning physical activity and sport. Older adults (aged 65 and older) are less likely than all other age groups to have received such information. Adults in older age groups are less likely than the youngest age group to seek out information themselves. In fact, adults aged 45–64, followed closely by adults over age 65, are the most likely to obtain this type of information from someone else.

Activity level Active Canadians are more likely than less active Canadians to have received information on local physical activity programs and services or to have spoken to someone about becoming or remaining active. Less active adults are more likely than active adults to obtain information from someone else, whereas active individuals are more likely to obtain this information both ways.

Implications The data described above indicate that relatively few individuals have recently received information on physical activity and, of these individuals, very few have actually attempted to seek out the information on their own. This appears to be most evident among the older adult population, as well as among inactive Canadians. Indeed, these segments, particularly the inactive, are key target groups for behaviour-change strategies. Sports and recreation service providers can play a key role in targeting inactive Canadians by reaching out to them in innovative ways and by offering programs that are easy to do, enjoyable, sociable, and readily incorporated into everyday life. The challenge is to reach the inactive, provide relevant services and opportunities, and address potential barriers restricting participation.



1999 Physical Activity Monitor, CFLRI



1999 Physical Activity Monitor, CFLRI

How Canadians get information on physical activity

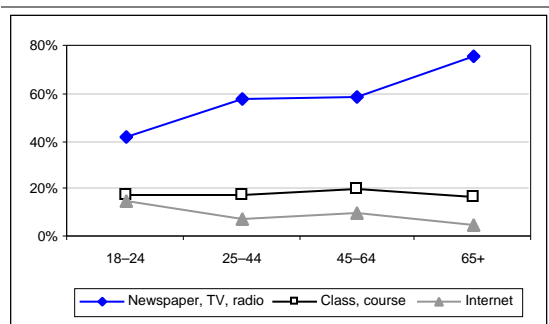
The majority of Canadians (57%) receive information on physical activity or sports through the media, including newspapers, television, and radio. In addition, 18% of adults receive physical activity information from an organized course, lecture, or workshop, and 10% receive information through the Internet. Residents of the territories are more likely than Canadians in general to report receiving information on physical activity through the media.

Age and sex Women are more likely than men to receive information on physical activity and sports from an organized course, class, workshop, or lecture. Adults in older age groups are more likely to receive physical activity information through the media: whereas 42% of 18–24 year-olds obtain information in this manner, as many as 76% of adults over 65 do so.

Activity level Active Canadians are more likely than less active Canadians to receive information on physical activity through an organized course, class, workshop, or lecture.

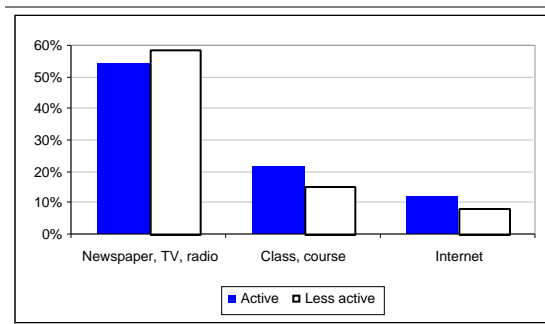
Implications The media have an important impact on the lives of Canadians. In a typical day, Canadians on the whole watch just over two hours of television,¹⁵ listen to the radio for roughly three hours,¹⁶ and spend roughly 15 minutes reading the newspaper, books, or magazines.¹⁵ Moreover, the Internet is used in approximately 42% of Canadian households.¹⁷ Policy and program developers, along with sports and recreation service providers, should consider using these channels when promoting physical activity to the masses. For example, solicit public service spots on local television and radio stations for informative tips on how to be active, and link these to advertisements. Advertise local physical activity programs through community newspapers or relevant sections of the city newspapers. Municipalities can provide information on local opportunities via the Internet, including program descriptions, fees, location, and so on. Provide secure electronic alternatives (such as phone, fax, and on-line) to facilitate registration for individuals in physical activity programs.

INFORMATION CHANNELS
by age



1999 Physical Activity Monitor, CFLRI

INFORMATION CHANNELS
by activity level



1999 Physical Activity Monitor, CFLRI

Where Canadians get information on physical activity

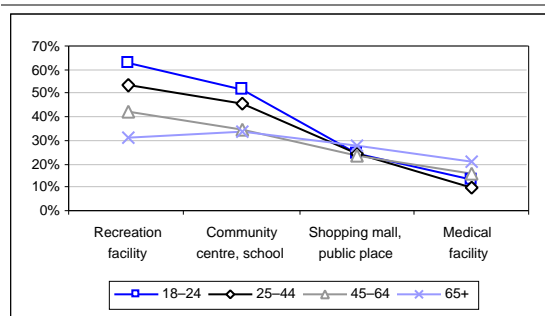
Half of Canadian adults obtain information on physical activity and sports at a facility designated specifically for recreation and sports, and 43% indicate receiving this information at a community centre, a school, or another facility not specifically designed for physical activity. One in four adults receive such information at a shopping mall, on the street, or in some other type of public place. Notably, only 13% of individuals gather this type of information from a medical facility, such as a doctor's office, a clinic, or another type of health care facility. Residents of Ontario are less likely and those in the Northwest Territories are more likely than Canadians in general to receive information at a shopping mall, on the street, or in some other type of public place.

Age and sex Women are more likely than men to receive information on physical activity from a facility not specifically designated for physical activity. With age, Canadians are less likely to receive information at a sport or recreation facility and at a facility not specifically designated for physical activity.

Activity level Active Canadians are more likely than less active Canadians to obtain information at recreation facilities and facilities not geared toward physical activity alone.

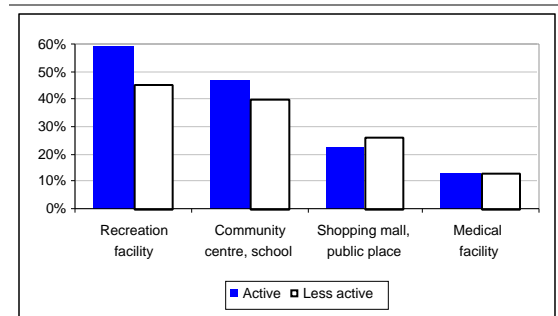
Implications Generally, Canadians seem to find information in facilities where they typically do their physical activities, such as recreation or community centres. However, one would expect (and this appears to be corroborated by the data) that these facilities reach more active than inactive individuals. Encouraging these types of facilities to become more involved in supporting physical activity may potentially reach inactive Canadians and influence them to become more active. For example, grocery stores can promote active transportation by providing home deliveries, allowing individuals to walk to the store without the worry of transporting their goods home. The fact that few adults report receiving information from medical facilities presents an opportunity to involve health practitioners in the promotion of physical activity. Given that Canadians recognize the link between physical activity and health, physical activity counselling by health care professionals may influence the inactive, especially older and sedentary adults, to be more active.

INFORMATION THROUGH FACILITIES
by age



1999 Physical Activity Monitor, CFLRI

INFORMATION THROUGH FACILITIES
by activity level



1999 Physical Activity Monitor, CFLRI

Obtaining information through social networks

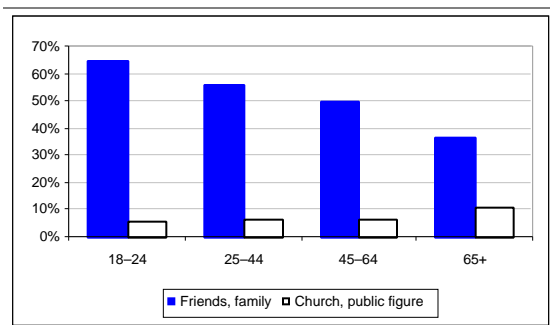
Many Canadians (55%) who have received information on physical activity or sports received this information from friends or family members. Only 7% of individuals who received information did so from a church member, public figure, or other prominent member of their community.

Age and sex Women and men are equally likely to receive information on physical activity and sports from friends or family or from a church member or a public figure. Adults in older age groups are less likely to receive their physical activity information from friends or family members.

Activity level Active Canadians are more likely than less active Canadians to receive information on physical activity or sports from friends or family members.

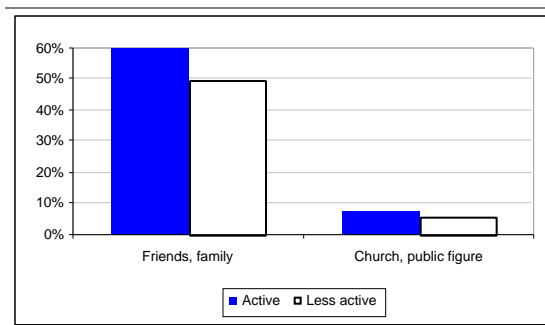
Implications At an individual level, a strong network of social support, including informal groups and individuals, can positively influence a person's behaviour. As evident in the above findings, many Canadians receive their information from their own social network of family and friends. However, this appears to be less of a recourse as one ages. Companionship, however, is a major reason why older individuals participate in group activities, including those involving physical activity.¹⁸ Program and communication strategies could focus on solutions for overcoming the common barriers of loneliness and lack of social support, especially among older adults and women, by strengthening the social support systems enabling these groups to be more active. An integrated system that includes individuals from local sports clubs, community recreation and parks, voluntary agencies, schools, workplaces, and churches would be most effective. All must provide leadership, or possibly even a mentoring role, for promoting and engaging in physical activity and active living.¹⁸ Moreover, programs can encourage people, when they are physically active, to find support through their own social network of friends, family, or co-workers.

INFORMATION THROUGH CONTACTS
by age



1999 Physical Activity Monitor, CFLRI

INFORMATION THROUGH CONTACTS
by activity level



1999 Physical Activity Monitor, CFLRI

Type of information received

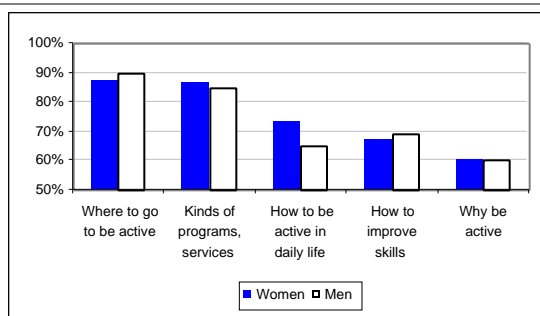
Canadian adults received various types of information on physical activity during the previous year: 88% received information on where to go to be active in their local community; 86% obtained information on the kinds of physical activity or sports facilities, programs, and services available in their community; 70% had information on how to become more active in their daily life; 68% obtained information on how to improve physical activity or sport skills; and 60% received information on why they should be active.

Age and sex Women are more likely than men to have received information on how to become more active in daily life. Where age groups are concerned, adults aged 18–44 are less likely than those over 45 to have received information on why they should be active, and adults aged 25–44 are less likely than those aged 45–64 to have received information on how to become more active in their daily life. Young adults (aged 18–24) are more likely than those aged 25–44 to report that they have received information on how to improve physical activity or sport skills. Young adults are also more likely than other age groups to have received information on the kinds of physical activity facilities, programs, and services available locally.

Activity level There is no difference between active and less active Canadians as to the type of information received.

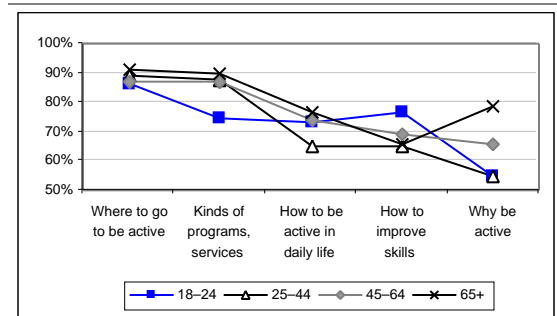
Implications Data in an earlier topic on accessing information on physical activity indicate that information on physical activity and sport is readily available in most communities. However, only 14% of adults actively seek this information. Tailoring information on physical activity to specific target groups may increase its relevance, thereby facilitating increases in the physical activity levels of Canadians. For example, programmers could provide parents (who are having a difficult time juggling conflicting commitments) and older adults (who often rate fear of injury or lack of skill as barriers to physical activity) with information on how to develop their own regular routine based on walking, home exercise, and swimming (for other ideas of activities to promote, see the topic *Popular physical activities for adults* earlier in this report) and with information on how to incorporate physical activity into daily life.

TYPE OF INFORMATION RECEIVED
by sex



1999 Physical Activity Monitor, CFLRI

TYPE OF INFORMATION RECEIVED
by age



1999 Physical Activity Monitor, CFLRI

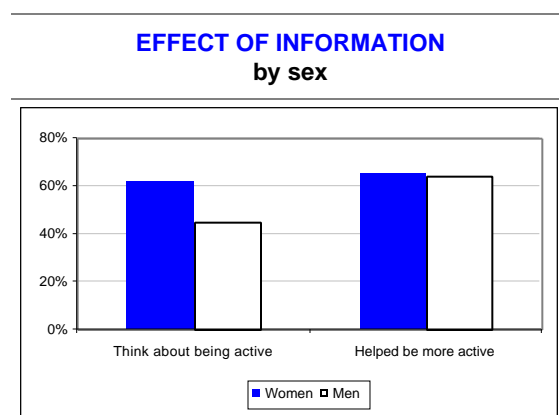
Does the information help you to become more active?

Of the Canadians who obtained information on physical activity, two-thirds believe that they are active regularly, 32% occasionally, and 3% not at all. Just over half of participants agree that the information they received during the past year has led them to think about being more active. Indeed, 65% report that the information helped them become more active, and 35% report that it had no influence at all. There are no provincial differences in responses.

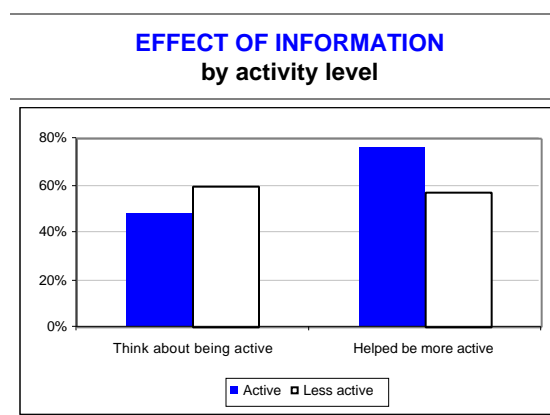
Age and sex While women are more likely than men to report that the information they received during the year led them to think about becoming more active, men and women are just as likely to report that the information they received actually helped them become more active. Adults over 65 are more likely than adults aged 45–64 to say that the information they received during the year actually helped them become more active. Older adults are also more likely than all other age groups to agree that the information they received led them to think about becoming more active.

Activity level Less active adults are more likely than active adults to agree that the information they received led them to think about being more active, but less likely to say that the information actually helped them become more active.

Implications Information strategies appear to be having the desired effect, having helped those currently active to become more active and those less active to think about being active. For the less active, information on the benefits of physical activity, how to easily access information on physical activity, along with practical suggestions on how to take steps to become more active (through traditional media, 1-800 numbers, personal help lines, cyber coaching, etc.) remain key ingredients of strategies to achieve the goal of reducing physical inactivity levels in Canada.



1999 Physical Activity Monitor, CFLRI



1999 Physical Activity Monitor, CFLRI



**LOCAL OPPORTUNITIES
TO BE ACTIVE**



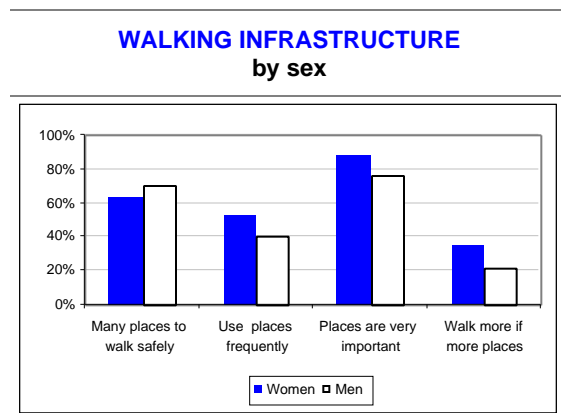
Community infrastructure: walking trails

Two-thirds of Canadians report that there are many places in their communities where they can safely walk, such as sidewalks, paths, and walking trails. More importantly, nine in ten Canadians make use of these opportunities, with half doing so frequently. The majority of adults (82%) believe that it is very important to have safe places to walk in their communities. One in four report that they would walk more often if there were more safe places to walk. Residents of Newfoundland and Nova Scotia are less likely, and those in Alberta and the Yukon are more likely, than Canadians overall to report that there are many places to walk safely. Adults in the Yukon are also more likely to report frequent use of such places, and adults in the Northwest Territories are less likely to state that it is very important to have safe places to walk.

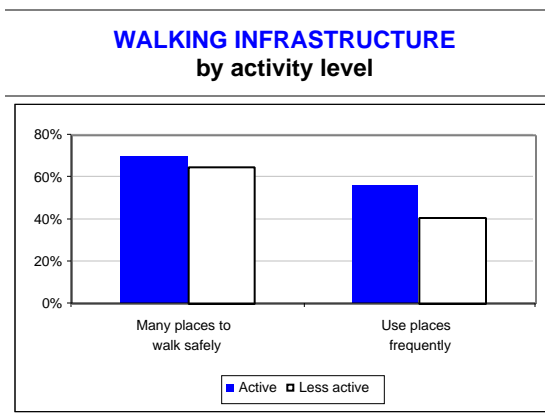
Age and sex Women are less likely than men to report that their communities have many places where they can walk safely. On the other hand, women are more likely than men to state that they frequently use these types of places, that it is very important to have safe places to walk in the community, and that they would walk more often if there were more safe places to walk. Adults aged 65 and older are more likely than adults in their early twenties to report frequent use of these types of places.

Activity level Active Canadians are more likely than less active Canadians to report the existence of many safe walking places and to say that they often use these places.

Implications Walking, a low-cost activity, requiring minimal skills and equipment, and with little risk of injury, is an ideal activity for less active people, particularly women, older adults, and lower income Canadians. Municipalities can promote and support active lifestyles by maintaining safe walking environments in their communities. As reported in an earlier topic, safety issues are a key concern among Canadians, especially older adults and women, and need to be understood and addressed through policies, programs, and services. Service providers can work with municipal authorities to maintain and increase the security features of existing infrastructure for physical activity, such as adequate lighting on and maintenance of sidewalks and trails. Consistent with earlier research showing that active Canadians are more likely to deem safe access to opportunities for being active as very important,¹⁹ the above results indicate that the availability of even more safe walking environments would help women to become more active.



1999 Physical Activity Monitor, CFLRI



1999 Physical Activity Monitor, CFLRI

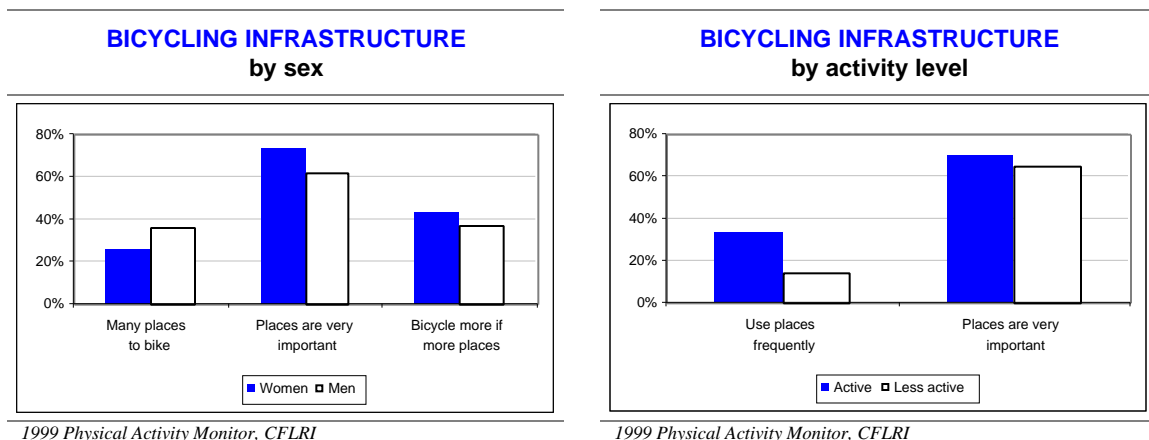
Community infrastructure: bicycling paths, trails, and lanes

One-third of Canadian adults report that there are many places in their communities where they can safely ride a bicycle, including designated bicycle lanes, paths, or trails set aside for riding bicycles. Although fewer than one-quarter of adults frequently use this infrastructure, 67% believe that the availability of places to ride a bicycle in their communities is very important. Indeed, 40% report that they would bicycle more often if there were more safe places to bicycle in their communities. Residents of the Atlantic provinces, Manitoba, and Ontario are less likely, and those in Alberta and the Yukon are more likely, than Canadians overall to cite the existence of many safe places to bicycle in their communities. Adults in Saskatchewan and Alberta are less likely to report that they would bicycle more often if there were more of these types of places available.

Age and sex Men are more likely than women to report that their communities have many places where they can bicycle safely. Yet women are more likely than men to deem the availability of places to bicycle as very important and to say that they would bicycle more often if there were more safe places to bicycle. Adults aged 65 and older are more likely than younger age groups to report the existence of many places to bicycle. Adults aged 18–24 are less likely than older age groups to see these places as very important.

Activity level Active Canadians are more likely than less active Canadians to deem safe places to bicycle as very important and to say they use such places frequently.

Implications Some research shows a dramatic difference between Europe and North America in terms of bicycle use as a means of urban travel (with North America being worse) and suggests that the main reason for this discrepancy is the emphasis of public policy on safe, efficient, and convenient bicycling.²⁰ For example, governments in the Netherlands, Denmark, Germany, and Switzerland have made concerted efforts to develop a broad system of bikeways and lanes with separate right-of-ways and priority over motorized vehicles.²⁰ Likewise, Canadian governments could promote and support bicycling by enforcing cyclist safety in mixed traffic; expanding and integrating bike path networks with current municipal infrastructure; maintaining or increasing the security features for bicycling, such as adequate lighting and maintenance of roads, bike paths, lanes, and trails; and providing safe, bicycle-friendly parking, storage, or facilities.



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1999 Physical Activity Monitor, CFLRI

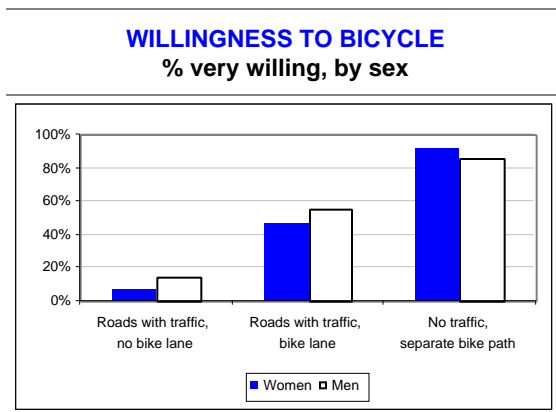
Willingness to bicycle on various types of routes

The 1999 Physical Activity Monitor further explored how the type of route affected Canadians' willingness to use a bicycle. An overwhelming 88% of adults say they are very willing to ride a bicycle on roads with a completely separate bicycle lane and no vehicle traffic. A sizable 57% report being very willing to ride on a multi-use trail where there is no vehicle traffic but where other people can use the trail for hiking or other activities, and 51% are very willing to ride in a lane designated for cyclists only on roads with vehicle traffic. Only 11% are very willing to ride a bicycle on roads with vehicle traffic and without a designated bicycle lane. Adults in the Northwest Territories are more likely than Canadians generally to report being very willing to bicycle on roads that have no designated bicycle lanes.

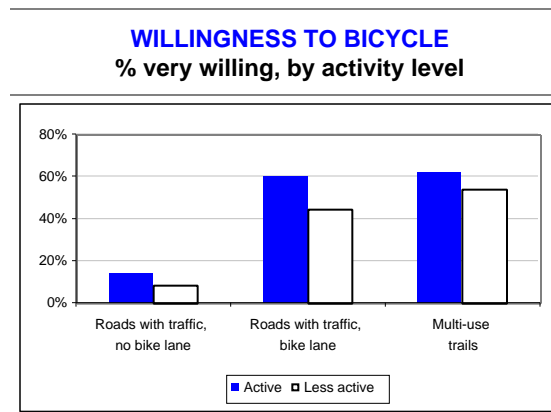
Age and sex Men are more likely than women to report that they are very willing to ride a bicycle on roads with vehicle traffic, with or without a designated bicycle lane. Conversely, women are more likely than men to be very willing to ride on roads with a completely separate bicycle path and with no vehicle traffic at all. Generally, adults in older age groups are less and less likely to be very willing to ride a bicycle on multi-use trails and in designated bicycle lanes on roads with vehicle traffic.

Activity level Active Canadians are more likely than less active Canadians to be very willing to bicycle on roads with vehicle traffic—with or without a designated bicycle lane—and on multi-use trails.

Implications A survey of bicycle commuters in North America showed that cyclists had more serious accidents or crashes on sidewalks than on major and minor streets without bicycling facilities.²¹ Streets with bicycle lanes or marked bicycle routes were reported to have about half of the risk of local streets, and bicycle paths were reported to be even safer.²¹ In light of these findings and the current results, municipalities can enhance the personal safety of bicyclists by expanding cycling networks and developing lanes that are completely separate from vehicle traffic. In situations where it is not feasible to build such lanes, municipalities can focus on enforcing strict vehicle adherence to road sharing, thus increasing the safety of cyclists in mixed traffic.



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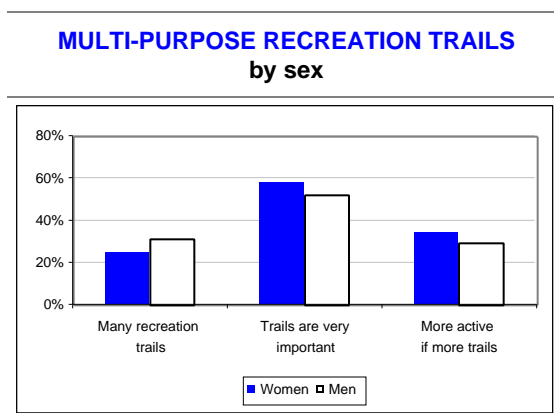
Community infrastructure: recreation trails

Just over one-quarter of adults report that there are many multi-purpose trails in their communities that can be used for different physical activities or sports (e.g., bicycling, hiking, cross-country skiing). Moreover, 18% frequently use these types of trails to do physical activity, and 55% use them sometimes. Most Canadians think multi-purpose trails are important for being active, with over half saying they are very important. One-third state that they would be active more often if there were more multi-purpose trails in their communities. Adults in Nova Scotia, New Brunswick, and Manitoba are less likely, and those in British Columbia, Alberta, and the Yukon are more likely, than Canadians overall to report that there are many such trails in their communities. Yukoners are also more likely to report that they use these trails frequently and that they are very important, yet they are less likely to state that they would be more active if there were more.

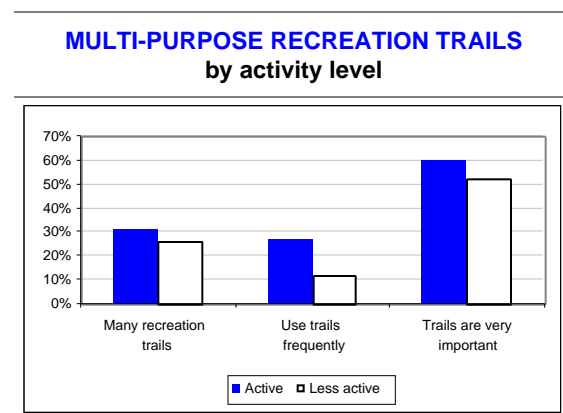
Age and sex While men are more likely than women to report that there are many local multi-purpose trails, women are more likely to rate trail availability as very important and to say that they would be active more often if more trails were available. Young adults (aged 18–24) are less likely than adults aged 25–44 to rate trails as very important, and older adults are less likely than other age groups to say that increased trail availability would boost their activity level.

Activity level Active Canadians are more likely than less active Canadians to report that there are many multi-purpose trails in their communities, that they use these types of trails frequently, and that their availability is very important.

Implications Canadians generally view multi-purpose trails as important contributors to their activity and, indeed, most have access to a local trail. Physical activity levels may be increased if the physical environment is conducive to participating, if there are safe and well-maintained paths near residences and aesthetically pleasing green spaces, including tree-lined paths and trails.²² Municipalities can encourage the use of these trails by linking residents with resources provided by organizations such as Go for Green. In 2000, Go For Green established an Internet resource, TrailPAQ, to foster community trails in Canada by sharing trail resources, supporting community-based trail initiatives, and promoting the use of trails nationally.²³



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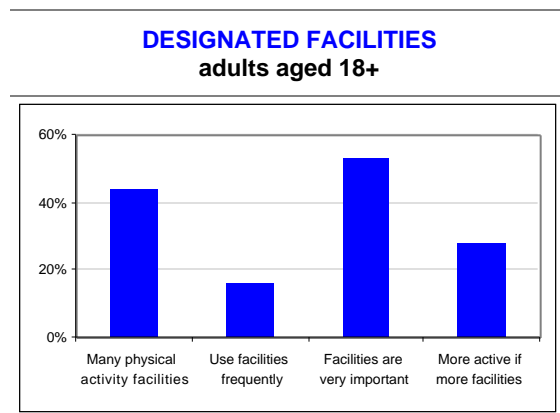
Community infrastructure: designated facilities

Roughly two out of five Canadians report that there are many facilities, places, and programs in their communities designed specifically for physical activity and sport—such as fitness centres, pools, arenas, and tennis courts. Sixteen percent use these types of facilities and programs frequently, and 45% use them sometimes. Half of adults think that it is very important to have such opportunities available in their communities, and 28% say that they would be active more often if more of these types of opportunities were available. Adults in Manitoba and in all eastern provinces are less likely, and those in British Columbia are more likely, than Canadians overall to report that there are many of these types of facilities in their communities. Adults in the Yukon are more likely to rate these facilities as very important.

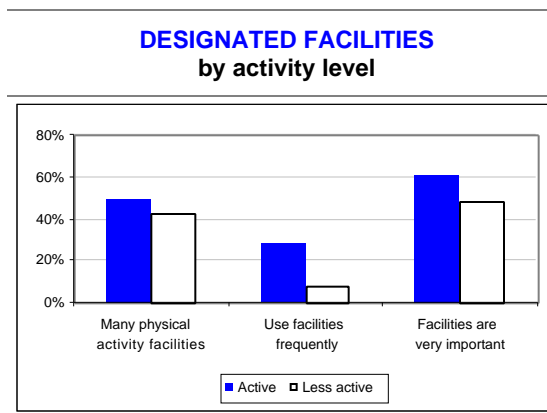
Age and sex Women are more likely than men to report that they would be active more often if there were more of these kinds of places. Young adults (aged 18–24) are more likely than adults over 45 to report that there are many of these types of facilities; they also more likely than other age groups to use them frequently. Adults under 45 are more likely than those over 45 to rate these facilities as very important and to say that increased availability would increase their physical activity levels.

Activity level Active Canadians are more likely than less active Canadians to cite the existence of many of these types of places in their communities, to report that they use these types of places frequently, and to say that it is very important to have these types of facilities available.

Implications Half of individuals using public facilities are active.²⁴ This is consistent with active Canadians being more aware of these types of facilities in their communities, more likely to use these facilities, and more inclined to deem them as important, compared with less active Canadians. Service providers could promote the use of these types of facilities and programs to less active people, focusing on activities with traditionally high participation rates, such as walking, social dancing, swimming, or exercise classes, and adapting other activity programs to reduce the skill level required and the competitiveness. Scheduling classes for never-ever participants or beginners and lowering the physical intensity of the activities should be suitable for groups having lower activity levels and who may need to learn new skills.



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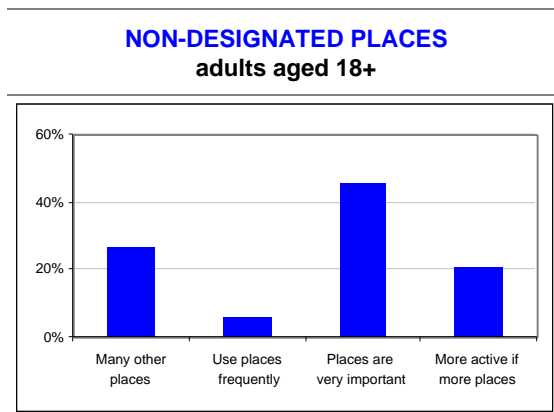
Community infrastructure: non-designated places

This topic explores the availability of other places where people could be active, but which are not specifically designed to increase participation among the general public. Examples of such places include school gyms used after hours, places at work where people can be active, community centres used for exercise, or public places where youth can skateboard. One-quarter of Canadians report that there are many such places in their communities. Only 6% use them frequently, a further 37% use them sometimes, and 56% never use them. Nonetheless, almost half of adults think that it is very important to have places like these in their communities, and 21% state that they would be active more often if there were more of these places. Adults in all eastern provinces are less likely, and those in British Columbia and the Yukon are more likely, than Canadians overall to report the existence of many of these types of places in their communities. Residents of the territories are more likely to rate these places as very important.

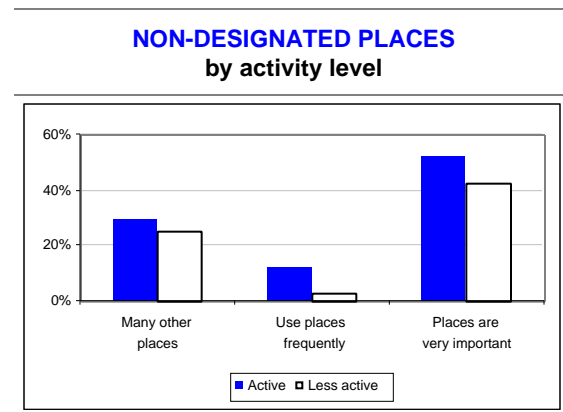
Age and sex Women are more likely than men to report that they never use these types of places to do physical activity.

Activity level Active Canadians are more likely than less active Canadians to report that there are many of these types of places to do physical activity in their communities, that they frequently use these places to be active, and that it is very important to have such places in the community.

Implications Smaller communities are less likely to report many local facilities, places, and programs *specifically* designed for physical activity and sport. Therefore, places that are *not* specifically designed to support participation by the general public may represent excellent venues for meeting residents' physical activity needs in small or rural areas. Service providers could evaluate the needs of people who do not have access to designated spaces and explore innovative programming to meet their needs using places that are not specifically designed for general participation in physical activity and sport. Promoting these places and the opportunities that they represent for becoming more active is particularly important for women and less active individuals, who appear to be less aware of such opportunities.



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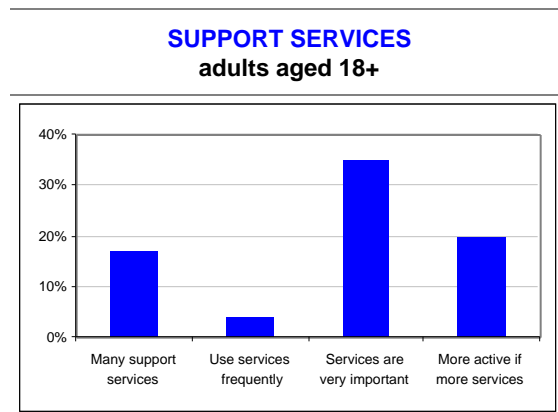
Opportunities to be active in the community: support services

Fewer than one in five Canadians report that there are many other kinds of support services available in their communities to help them be active, whether information or advice on how to be active, links to places where specific instruction or coaching can be obtained, or access to child care while participating in physical activity. The low usage levels reflect this: only 4% frequently use such services, 31% use them sometimes, and 66% never use them. Nonetheless, about one-third of adults believe that it is very important that these kinds of support services be available to help them be active. A further 48% believe it is somewhat important. Indeed, 20% state that they would be active more often if there were more of these types of services available. Residents of British Columbia are more likely than Canadians overall to cite many such local services.

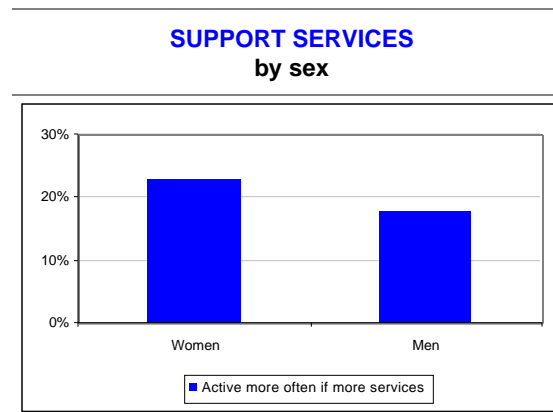
Age and sex Women are more likely than men to report that they would be active more often if there were more support services available in their communities. Older adults (aged 65 and older) are more likely than younger age groups to report the existence of many of these kinds of services. Young adults (aged 18–24) are less likely than older age groups to rate them as very important.

Activity level Less active Canadians are more likely than active Canadians to report never using such support services.

Implications In previous research, 32% of Canadians rated affordable support services as very important in helping them to adopt and maintain an active lifestyle.¹⁹ Indeed, this support was perceived as much more important by women than by men. Since so few adults appear to frequently use support services, it may be worthwhile to target information on existing support services to encourage physical activity among specific groups. For example, information or advice on how to be active or information on beginner classes might best be targeted to those contemplating physical activity. Links to places where specific instruction or coaching can be obtained could be targeted toward women or older adults, who are more likely to report lack of skill as a barrier.²⁵ Child care services could be targeted to 25–44 year-olds, who traditionally find this a barrier to physical activity.²⁵



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SYSTEMIC BARRIERS TO PHYSICAL ACTIVITY



Adults' barriers to becoming more active: skill and ability

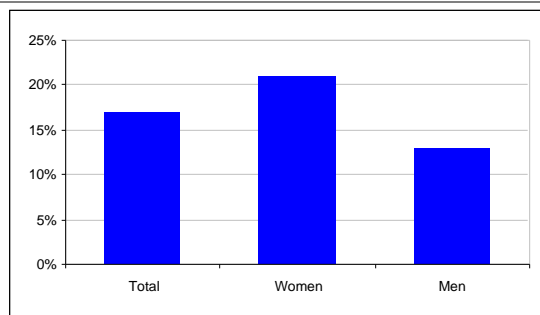
Barriers to physical activity are diverse and individual, with the majority discriminating between more active and less active Canadians. In this and the following seven topics, we will look at Canadians' beliefs toward a number of perceived barriers. These barriers are grouped by category, the first one related to skill and ability. One in five (17%) Canadian adults strongly agree that they are not good at doing sports and physical activity, with another 9% agreeing with the statement at least to some extent.

Age and sex Women are more likely than men to hold a strong belief that they are not good at doing sports and physical activity. Holding strong beliefs about one's lack of skill or ability increases with age, from 8% among 18–24 year-olds to 30% among adults over 65.

Activity level Less active Canadians are more likely than their active counterparts to strongly agree that they lack skills for sports and physical activity.

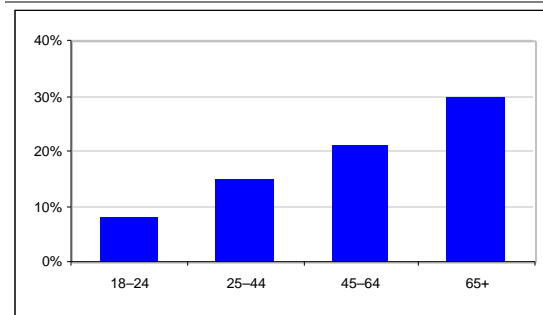
Implications Perception of lack of ability or skills related to physical activity appears to be most pervasive among women, older adults, and less active Canadians. Therefore, programs and policies that focus on activities such as mall walking, walking to the corner store rather than taking the car, playing with the kids at the playground, or gardening offer a good start toward a physically active lifestyle and may help these target groups become more active. Beginner programs and events could be promoted specifically to these groups. Moreover, since women and inactive Canadians are also the most likely groups to report “feeling uncomfortable” as a barrier to physical activity,²⁵ advertising the programs and events as “beginner only” may help to encourage participation.

**LACK OF SKILL FOR PHYSICAL ACTIVITY
by sex (% agreeing strongly)**



1999 Physical Activity Monitor, CFLRI

**LACK OF SKILL FOR PHYSICAL ACTIVITY
by age (% agreeing strongly)**



1999 Physical Activity Monitor, CFLRI

Adults' barriers to becoming more active: cost

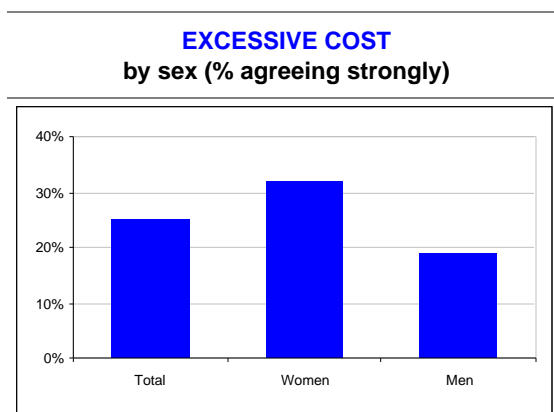
One-quarter of Canadian adults strongly agree that the dollar costs of doing physical activity are too high for them. A further 12% agree with this statement. New Brunswickers are more likely than Canadians overall to strongly agree that the cost of physical activity is simply too high.

Age and sex Women are more likely than men to strongly agree that the cost of doing physical activity is too high for them. Adults aged 18–44 are more likely than adults aged 45–64 to strongly agree with the statement.

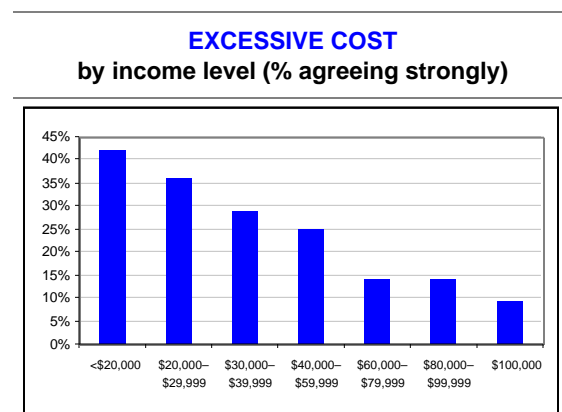
Activity level Active Canadians are as likely as less active Canadians to strongly agree that the cost of doing activity is too high.

Income level Individuals from low-income groups are more likely than those in higher income groups to agree strongly that the cost of physical activity is too high.

Implications With one in four Canadians strongly agreeing that the cost of physical activity is too high, programs and policies must focus on how Canadians can adopt a physically active lifestyle without overburdening their pocketbooks. A focus on active commuting, taking the stairs instead of the elevator, and other inexpensive yet active alternatives provides a viable means of incorporating physical activity into daily life. Recreation facilities, sports clubs, and organizations may consider waiving or reducing user fees for low-income families and providing discounts for enrolment of two or more members from one family within a given sport. For low-income Canadians, facilities and sports organizations may also consider services in lieu of registration fees, such as volunteering to coach a soccer team or serve on the executive board of a sports organization.



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Adults' barriers to becoming more active: information

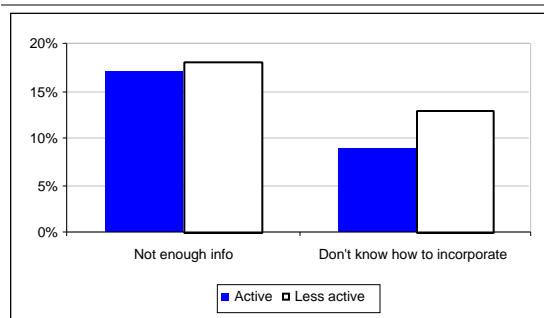
One-third of adults believe that there is not enough information available on local physical activity and sport opportunities (with 17% of Canadians *strongly* agreeing that this is so). In addition, as many as 12% of adults strongly agree and 9% agree that they lack awareness of how to build physical activity into their daily life. Residents of New Brunswick are more likely than Canadians overall to agree strongly that there is a lack of information available on local physical activity.

Age and sex Men are just as likely as women to strongly agree that there is not enough information on local physical activity opportunities. Older adults (aged 65 and older) are more likely than young adults to cite both a lack of information on opportunities available locally and a lack of awareness of how to build physical activity into daily life.

Activity level Less active Canadians are more likely than active Canadians to strongly agree that they do not know how to build physical activity into daily life.

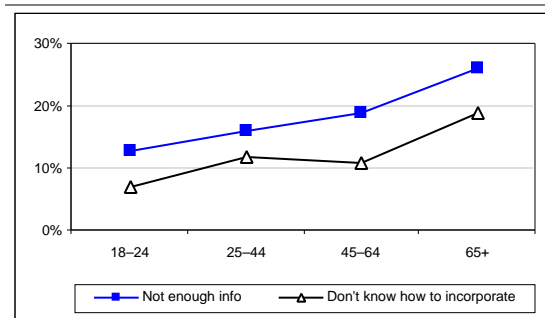
Implications An earlier topic reported that adults over 65 are less likely than other age groups to have received information about physical activity. This observation is consistent with the above findings showing that older adults are more likely to perceive a lack of information on local physical activity opportunities. To counter this barrier, recreation facilities and physical activity organizations may wish to collaborate with other professionals who deal with older adults on a regular basis (such as nurses, local physicians, staff at retirement homes, churches, hospitals, etc.) in the development and delivery of programs and opportunities targeted to older adults. This collective insight may help to determine the best strategies for clearly communicating the benefits (social, physical, mental) of a physically active lifestyle, providing supportive social networks for physical activity, identifying the types and locations of local physical activity programs, facilitating convenient transportation to these opportunities, and improving referrals to existing opportunities. In addition, policies and programs might incorporate information on how to incorporate physical activity into daily life as a first step to getting the inactive population to become more active.

LACK OF INFORMATION
by activity level (% agreeing strongly)



1999 Physical Activity Monitor, CFLRI

LACK OF INFORMATION
by age (% agreeing strongly)



1999 Physical Activity Monitor, CFLRI

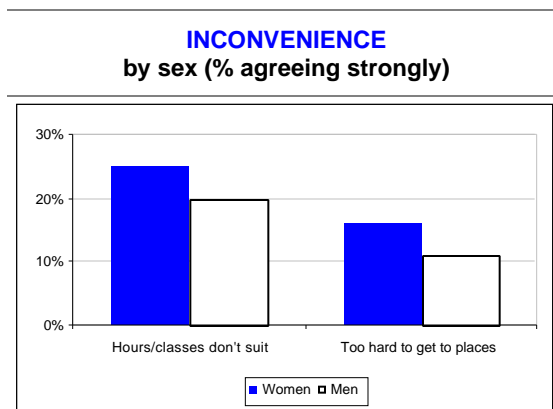
Adults' barriers to becoming more active: convenience

Almost one-quarter of Canadian adults strongly agree and 14% agree that the hours and class times offered by their local centres don't suit them. In addition, 14% of adults strongly agree and 7% agree that it is too hard to get to places where they can be active. Residents of New Brunswick are more likely than Canadians overall to strongly agree with this second statement.

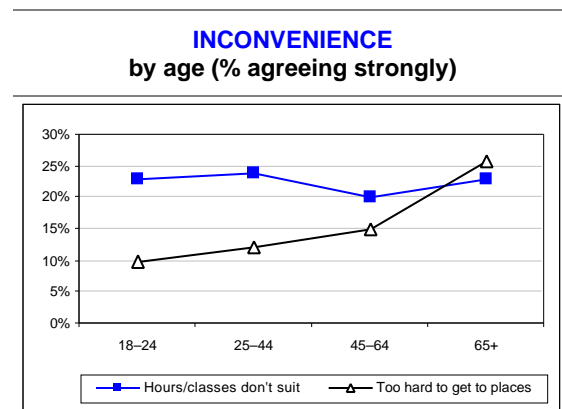
Age and sex Women are more likely than men to strongly agree that the hours and classes provided by local centres do not suit their schedule and that these places are too hard to get to. Adults aged 65 and older are more likely than adults in younger age groups to strongly agree that it is too hard to get to places to be active.

Activity level Less active Canadians are more likely than active Canadians to strongly agree that it is too hard to get to places to be active.

Implications Older adults and women appear to perceive issues of convenience more keenly than do other groups. Facilities and programs may need to adjust their services to support the constant juggle that Canadians have to face in balancing current work, family, and social obligations. Various time slots such as early morning, lunch hour, after work, or late night may provide more flexibility for women to participate in physical activity, whereas mid-morning and afternoon classes may suit older adults. Family-oriented scheduling may also provide such flexibility for women. To overcome this barrier, promote activities that do not require specific facilities and that can be easily incorporated into daily life, such as walking. Also promote at-home activities as an alternative. Because safety is a concern of women (as will be discussed in one of the following topics), working with local authorities to ensure accessible public transit to the facilities, particularly in the evening, may help to overcome the barrier of safe access and increase suitable scheduling opportunities.



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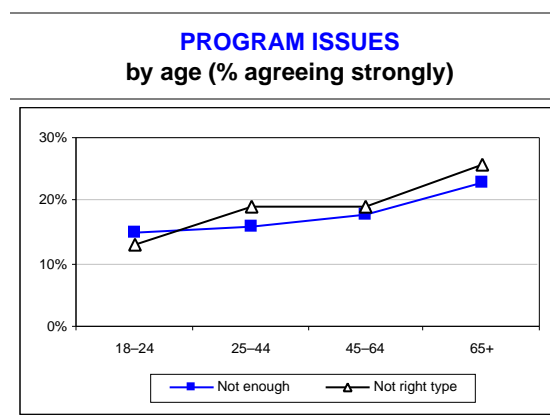
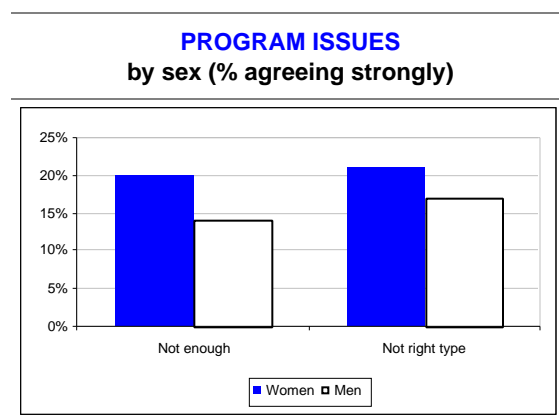
Adults' barriers to becoming more active: programs available

A full 17% of Canadians strongly agree that there are not enough programs, services, or facilities in and around their local community, with another 19% agreeing with this statement. Similarly, one in five adults strongly agree, and 13% agree, that the programs and facilities available are not the right type for them. Residents of Newfoundland and Nova Scotia are more likely than Canadians overall to strongly agree that there are not enough programs, services, and facilities, and residents of New Brunswick are more likely to strongly agree that programs and facilities are not the right type.

Age and sex Women are more likely than men to strongly agree that there are not enough programs, services, or facilities in their local community. Older adults are more likely than younger adults to strongly agree that there are not enough programs, services, or facilities and that the programs and facilities are not the right type for them.

Activity level Less active Canadians are more likely than active Canadians to strongly agree that the programs and facilities available are not the right type.

Implications The above findings indicate that current programs and facilities are less likely to address the needs of less active Canadians, creating a major challenge in increasing the activity levels of Canadians. This is consistent with the fact that older adults and women—over-represented among the less active—are more likely to report that currently available services, programs, and facilities do not meet their needs. Therefore, communities and service providers may want to find out what types of activities the less active population wishes to do. While more research is required to understand the needs of less active people and the types of facilities, programs, and services that would assist them in becoming more active, current findings indicate that a greater focus on the principles of behaviour change (e.g., self-efficacy, self-regulation, relapse-prevention strategies, group cohesion, etc.) can significantly increase attendance and reduce drop-out rates.^{7,26}



Adults' barriers to becoming more active: social support

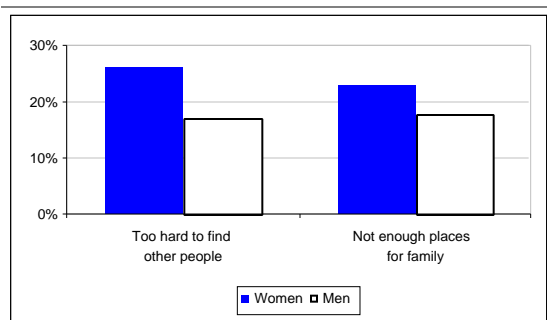
Almost one-quarter of Canadians strongly agree that it is too hard to find other people to be active with, with a further 15% agreeing that this is the case. One in five adults strongly agree and 11% agree that there aren't enough places where they can be active and bring their children along. Finally, 17% of adults strongly agree and 12% agree that it is too hard to find the right type of coaching or instruction. Newfoundlanders are more likely than Canadians overall to strongly agree that it is too hard to find the right type of coaching and instruction and, along with New Brunswickers, to strongly agree that there aren't enough places to be active with the family.

Age and sex Women are more likely than men to strongly agree that it is too hard to find other people to be active with and that there are not enough places where you can bring the children. Older adults (over 65) are more likely than those aged 45–64 to strongly agree that it is too hard to find other people to be active with. Adults aged 25–44 are more likely than those aged 45–64 to strongly agree that there are not enough places where you can be active and bring the children along.

Activity level Active Canadians are as likely as less active Canadians to feel strongly that social support is an issue.

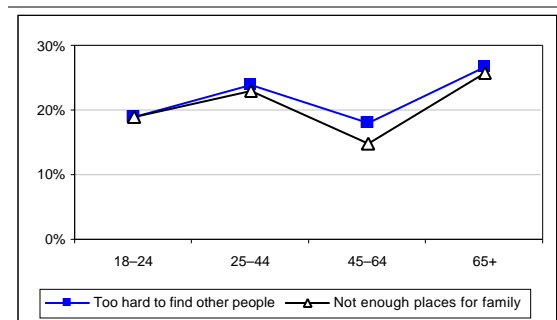
Implications Lack of child care, lack of a partner, and lack of support are all personal factors that have been identified as important issues in maintaining an active lifestyle.²⁵ To help reduce these obstacles, facilities could offer more family-oriented programming, such as Parents' and Tots' swim classes, aerobic classes where you can bring your infant, simultaneous programming where parent and child can engage in separate physical activity classes at the same time at the same facility, child care services, and amenities such as family change rooms to encourage and support family participation. In addition, providing networking opportunities, especially for women and older adults, and adding a social component to programs so participants get to know one another can help to encourage the development of "buddies" for physical activity, thereby increasing potential partners for participating in activities.

**LACK OF SOCIAL SUPPORT
by sex (% agreeing strongly)**



1999 Physical Activity Monitor, CFLRI

**LACK OF SOCIAL SUPPORT
by age (% agreeing strongly)**



1999 Physical Activity Monitor, CFLRI

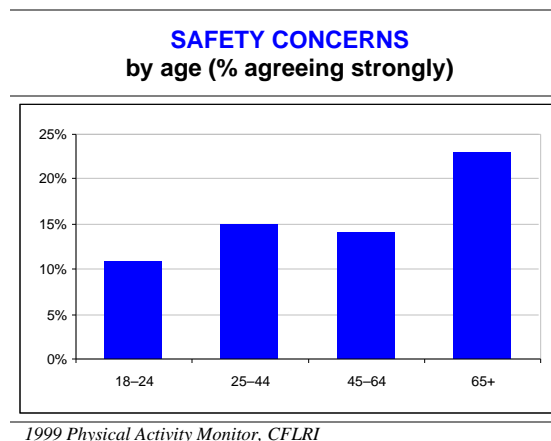
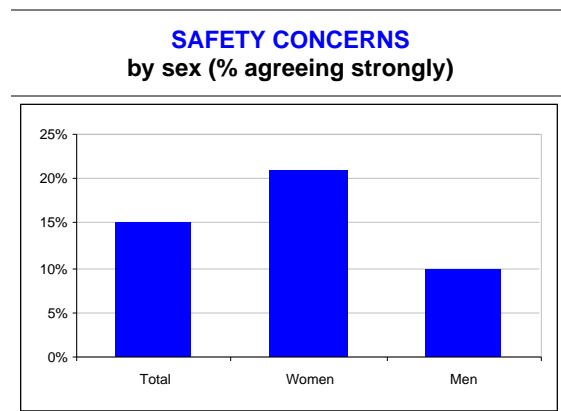
Adults' barriers to becoming more active: safety

As many as 15% of Canadian adults strongly agree and 8% agree that safety concerns keep them from walking or bicycling. Although the majority (62%) strongly disagree that safety concerns keep them from walking and bicycling, those who do find safety an issue cite many factors that prevent safe walking and bicycling in their neighbourhoods: 34% strongly agree that there is too much traffic, 20% strongly agree that there is too much crime on the streets, 24% strongly agree that there are badly maintained sidewalks and bike lanes, and 27% strongly agree that there are poorly lit sidewalks and streets. New Brunswickers are more likely than Canadians overall to agree strongly that safety concerns prevent them from walking or bicycling. Compared with Canadians overall, adults in Nova Scotia are more likely to agree strongly that poor lighting is a factor.

Age and sex Women are more likely than men to strongly agree that concerns of safety keep them from walking or bicycling. Adults over 65 are more likely than adults in younger age groups to strongly agree that concerns of safety keep them from walking or bicycling and that too much crime on the streets prevent them from walking or bicycling.

Activity level Active and less active Canadians hold similar views about these types of safety issues.

Implications Safety issues are a primary concern in designing policies, programs, and services to increase physical activity among older adults and women. A “buddy” network system, where people can link up with others who also want to be active, can both increase social support and decrease concerns about safety. It would also be worthwhile to work with municipal authorities to maintain and increase the security features of existing infrastructure for physical activity, such as adequate lighting on sidewalks and bike paths, adequate maintenance of sidewalks, and the provision of separate bicycle lanes, especially on roads with heavy traffic.



Adults' barriers to becoming more active: maintenance of facilities

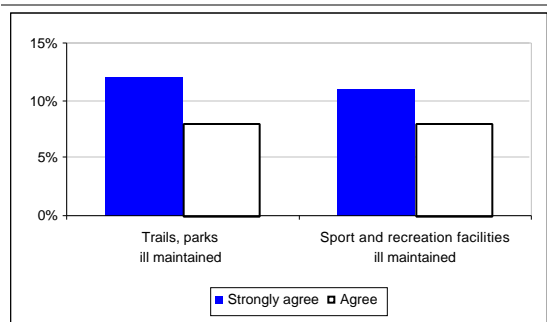
One in five adults agree that trails and parks are not well maintained in their community, (12% strongly agree, 8% agree). Similarly, 11% of Canadians strongly agree and 8% agree that sport and recreation facilities are not well maintained in their community. New Brunswickers are more likely than Canadians overall to strongly agree that sports and recreation facilities are not well maintained.

Age and sex Women are as likely as men to strongly agree that trails, parks, and sport and recreation facilities are not well maintained in their community. Adults aged 65 and older are more likely than adults aged 18–44 to strongly agree that these facilities are not well maintained.

Activity level Active and less active Canadians hold similar views about the maintenance of trails, parks, and sport and recreation facilities.

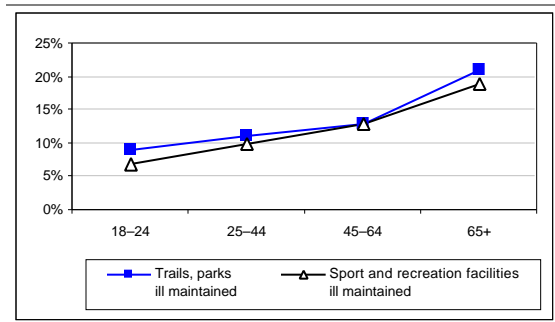
Implications Although the majority of Canadians do not appear to find the maintenance of facilities to be an issue, ill-maintained facilities and trails may add to the safety concerns identified in the preceding topic. While these concerns do not appear to be directly related to activity level, they do have particular relevance for older adults and may be related to the relative prominence of lack of facilities and lack of safety being cited as factors decreasing participation among this group.²⁵ To better understand the needs of older clients and help retain them, it may be helpful to survey them about maintenance issues and the appropriateness of various aspects of a facility in meeting their needs now or in the future (e.g., swimming pool, changing rooms, entrance way, etc.).

POOR MAINTENANCE OF FACILITIES
% of Canadians agreeing strongly



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POOR MAINTENANCE OF FACILITIES
by age (% agreeing strongly)



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Children's barriers to becoming more active: skill and ability

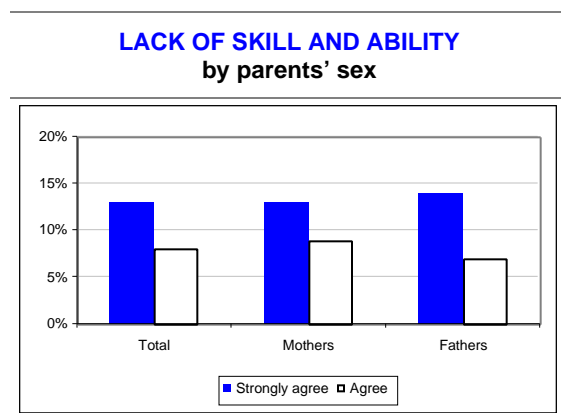
In this and the following six topics, we examine parents' beliefs about factors that may limit their children's participation in physical activity. Roughly one in five Canadian parents believe to some extent that their child does not feel he or she is good at sports and physical activity (13% strongly agree and 8% agree).

Children's age and sex Girls' parents are more likely than boys' parents to strongly agree that their children feel they lack skills for sports and physical activity. In addition, parents of 13–17 year-olds are more likely than parents of younger children (aged 5–12) to strongly agree with this statement.

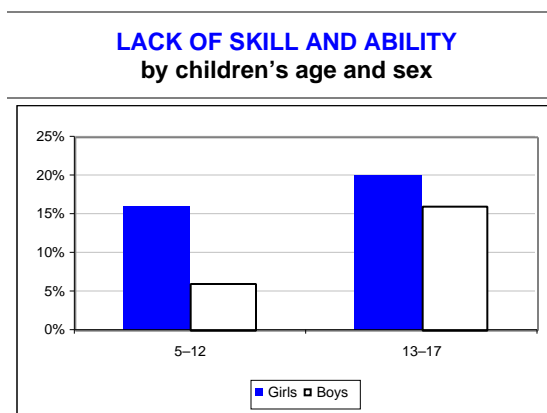
Parents' sex One in five mothers and fathers alike believe that their children do not feel they are good at sports and physical activity.

Parents' activity level Active parents are just as likely as their less active counterparts to strongly agree that their children see themselves as lacking the necessary skills to participate in sports and physical activity.

Implications If children perceive themselves as being competent in physical activity or sport and they have confidence in their abilities, they are more likely to participate.¹⁴ Many social and environmental supports can help to promote physical activity among Canadian children. For example, schools and community recreation facilities can play an important role by combining promotion with opportunities. They can provide adequate coaching and instruction for physical activities; promote and provide the most popular physical activities for age- and gender-specific groups; or bring in local mentors, celebrities, or role models to encourage participation while opportunities are being offered. Schools can also encourage and foster positive attitudes and perceptions about the role of physical activity in every child's life within an enriched health program.



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Children's barriers to becoming more active: information

Two in ten parents strongly agree that there is not enough information on local physical activity and sport opportunities available for children. A further one in ten parents agree with this statement.

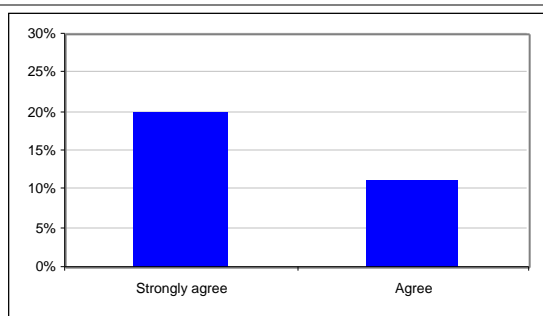
Children's age and sex Parents of adolescents (aged 13–17) are more likely than parents of younger children (aged 5–12) to strongly agree that there is not enough information on local physical activity opportunities for their children. There are no differences between girls' parents and boys' parents.

Parents' sex Fathers are just as likely as mothers to strongly agree that there is not enough information on local physical activity opportunities for their children.

Parents' activity level Less active parents are just as likely as their more active counterparts to agree strongly that there is not enough information on local physical activity opportunities for their children.

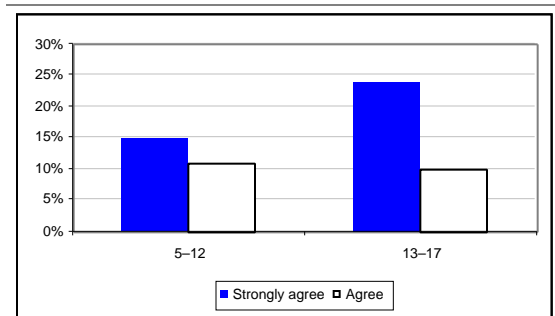
Implications Roughly one-third of parents agree that there is not enough information on local physical activity opportunities for their children. Because of this, sport and recreation organizations may wish to collaborate with other organizations that promote and deliver programs and opportunities for children on a regular basis. Potential partners include schools, local health organizations, churches, and voluntary organizations, such as Boys and Girls Clubs, Boy and Girl Scouts, and so on. These groups can also help identify the best strategies for providing supportive social networks for physical activity, for identifying the types and locations of local physical activity programs, and for facilitating convenient transportation to these opportunities.

LACK OF INFORMATION ON OPPORTUNITIES
according to parents overall



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LACK OF INFORMATION ON OPPORTUNITIES
by children's age



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Children's barriers to becoming more active: convenience

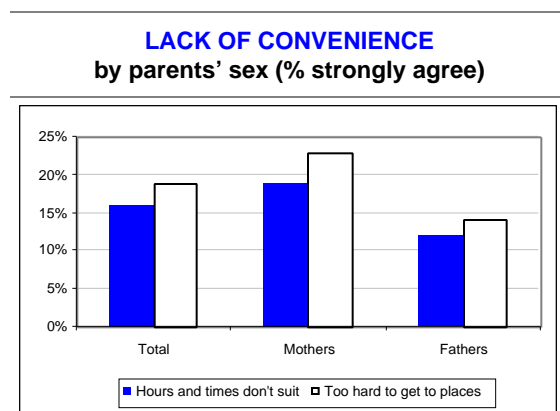
One-quarter of Canadian parents believe (16% strongly agree and 9% agree) that the hours and class times offered by their local centres do not suit the needs of their children. In addition, 19% of adults strongly agree and 9% agree that it is too hard to get to places where their children can be active.

Children's age and sex There are no differences between parents of older children and parents of younger children and no differences between girls' parents and boys' parents in this respect.

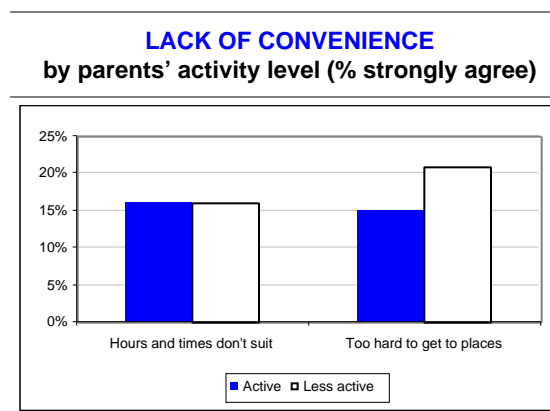
Parents' sex Mothers are more likely than fathers to strongly agree that it is too difficult to get to places where their children can be active.

Parents' activity level Both active and less active parents are equally likely to strongly agree that the hours and classes provided by local centres do not suit the needs of their children. However, less active parents are more likely than active parents to strongly agree that it is too difficult to get to places where children can be active.

Implications Similar to an earlier topic on barriers related to physical activity and convenience for adults, facilities and programs may need to make some adjustments. The balancing act that Canadian families face with work, familial, and social commitments should be taken into consideration when planning programs. More family-oriented scheduling could provide flexibility for families to participate in physical activity and recreation at the same time and location. For example, facilities that provide a multitude of activities would allow parents to engage in their own physical activity programs while their children participate in their activities. Schools can also help by increasing convenient opportunities for physical activity. For example, schools could implement activity-oriented games during recess period, lunch hour, or after school to encourage moderate-to-vigorous activity. They could also provide adequate equipment and facilities to encourage physical activity.²⁷



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Children's barriers to becoming more active: programs available

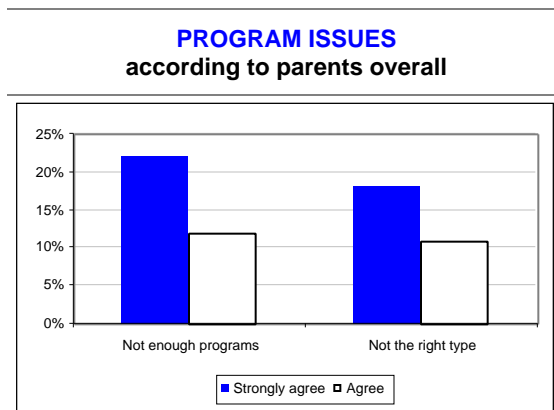
Almost one-quarter of parents strongly agree that there are not enough programs, services, or facilities in and around their local communities that offer opportunities for their children to be active. Another 12% agree with this statement. Roughly one in five parents strongly agree, and 11% agree, that the programs and facilities available are not the right types for their children. Parents in Newfoundland are more likely than Canadian parents overall to strongly agree that there are not enough programs, services, and facilities for their children.

Children's age and sex Parents of 13–17 year-olds are more likely than parents of 5–12 year-olds to strongly agree that there are not enough programs, services, or facilities in their communities for their children to be active. They are also more likely to strongly agree that the programs and facilities available are not the right types for their children. There are no differences between girls' parents and boys' parents.

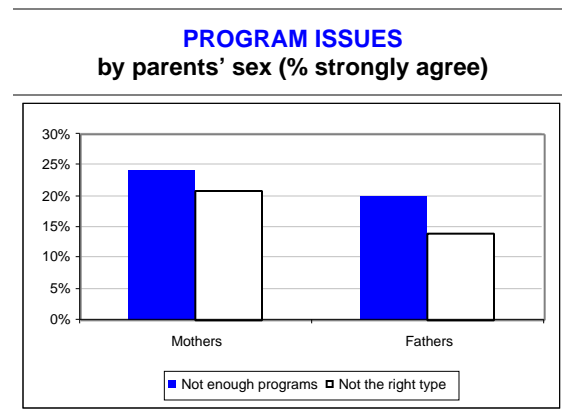
Parents' sex Mothers are more likely than fathers to strongly agree that programs and facilities are not the right types for their children.

Parents' activity level Active and less active parents are equally likely to strongly agree about programming issues.

Implications Research has shown that physical activity levels are higher for children who have access to convenient play spaces, equipment, and transportation to activities.¹⁴ Municipalities and schools can contribute in a variety of ways to suit the needs of the families in their communities. They can provide adequate and safe green space, such as parks, playgrounds, and walking, bicycling or multi-purpose trails; facilities, such as community centres, schools, or sport and recreation complexes; and opportunities, such as coaches, mentors, and opportunities to try new activities.²⁷ To ensure that the needs of children are being met, programs could involve children and youth in their design and evaluation. Factors to examine could include hours of availability, location of facilities, accessibility, and program costs.



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Children's barriers to becoming more active: cost

One-quarter of Canadian parents strongly agree that the dollar costs associated with their children doing physical activity are too high. A further 12% agree with this statement. Parents within all provinces and territories across Canada perceive this issue similarly.

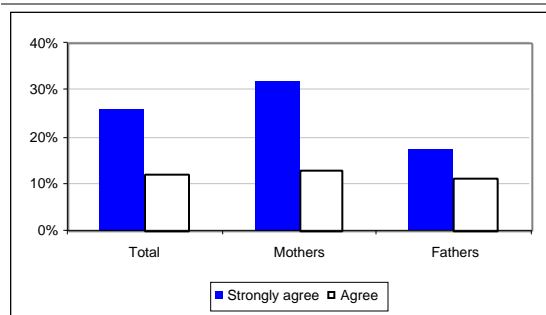
Children's age and sex There are no differences between parents of older children and parents of younger children and no differences between girls' parents and boys' parents in this respect.

Parents' age and sex Mothers are more likely than fathers to strongly agree that the cost of their child doing physical activity is too high. Younger parents are more likely than older parents to strongly agree with this statement.

Parents' activity level Less active parents are just as likely as active parents to strongly agree that the dollar costs associated with their children doing activity are too high.

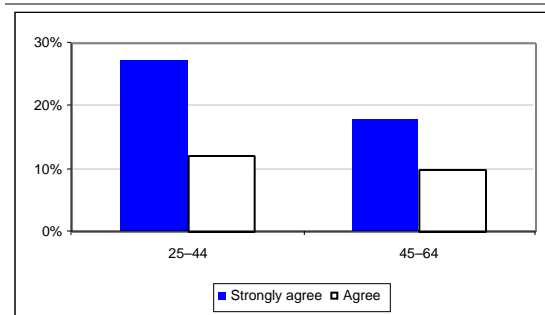
Implications The perceived cost of physical activity appears to be a barrier for one-third of parents. Schools can help by providing accessible opportunities, such as intramural sports, quality daily physical education, or structured physical activity during recess, lunch periods, and after school. Municipalities can help by subsidizing costs of local programs for low-income families. However, care needs to be taken to avoid identifying or ostracizing families requiring this assistance. Recreation facilities and sports organizations can provide families with cost-effective opportunities by reducing registration fees for enrolment of two or more family members in an activity, supplying fee discounts as a reward for regular and long-term attendance in programs, accepting installment payments of fees, or considering services in lieu of fee payment. Such services could include parents or children volunteering by coaching, officiating, or serving on a board of directors in a sport organization or facility.

**COST OF PHYSICAL ACTIVITY IS TOO HIGH
by parents' sex**



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**COST OF PHYSICAL ACTIVITY IS TOO HIGH
by parents' age**



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Children's barriers to becoming more active: social support

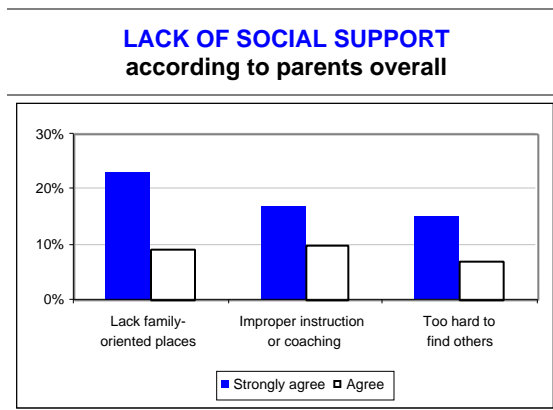
One-quarter of Canadian parents strongly agree and 9% agree that there aren't enough places where a family can be active together. In addition, 17% of parents strongly agree and 10% agree that it is too difficult to find the right type of coaching or instruction for their children. Finally, roughly one-quarter of parents estimate that it is too difficult to find other people for their children to be active with (15% strongly agree and 7% agree).

Children's age and sex Parents of 13–17 year-olds are more likely than parents of 5–12 year-olds to strongly agree that it is too hard to find the right type of coaching or instruction for their children. There are no differences between girls' and boys' parents.

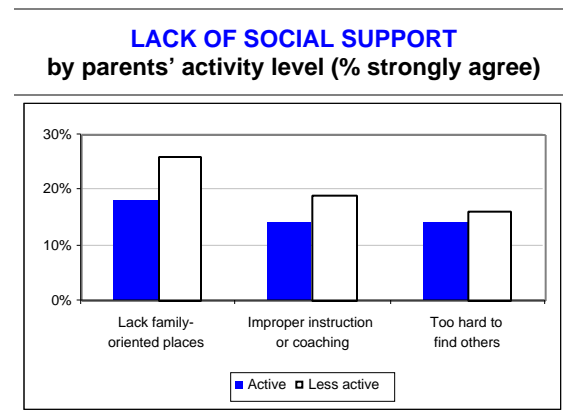
Parents' sex Mothers are as likely as fathers to strongly agree that it is both too difficult for their children to find other children to be active with and too difficult to find the right type of instruction for their children. Parents of either sex are also equally likely to strongly agree that there are not enough places where families can be active together.

Parents' activity level Finding other people to be active with and the right type of instruction are seen as equivalent barriers among both active and less active parents. However, less active parents are more likely to strongly agree there are not enough places where a family can be active together.

Implications Research shows that parental, peer, and friend support plays a role in determining the participation of physical activity for children and youth.¹¹ Thus, parents who have a positive attitude toward physical activity and act as role models for being active can positively influence their children's physical activity.¹⁴ By providing appropriate age-related opportunities for children to be active, schools and community organizations can contribute to peer and friend support. Parents also play an important supportive role in transporting their children to physical activity events. However, 34% of parents cite transportation problems and 38% agree that their children's physical activity inconveniences other family members.²⁸ Community recreation departments and sports organizations may wish to explore, suggest, or organize alternatives, such as car pooling, to help Canadian families manage competing time and scheduling demands.



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Children's barriers to becoming more active: safety

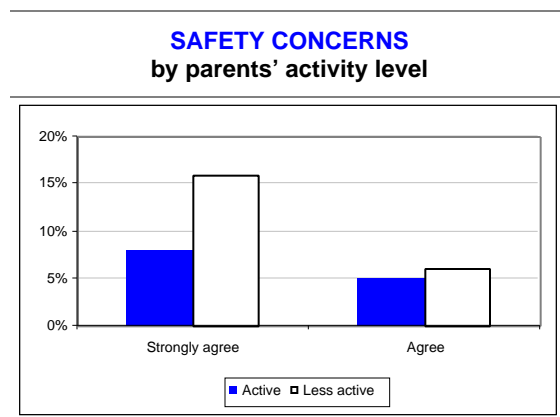
The majority (65%) of parents strongly disagree that safety concerns keep their children from walking and bicycling. Nevertheless, 13% of Canadian parents strongly agree and 6% agree that safety concerns keep their children from walking or bicycling. Of those concerned with safety issues, 22% strongly agree that sidewalks and bike lanes are not properly maintained, and 21% strongly agree that sidewalks and streets are poorly lit.

Children's age and sex Parents of younger children (aged 5–12) are more likely than parents of adolescents (aged 13–17) to strongly agree that safety concerns keep their children from walking or bicycling. There are no differences between girls' parents and boys' parents.

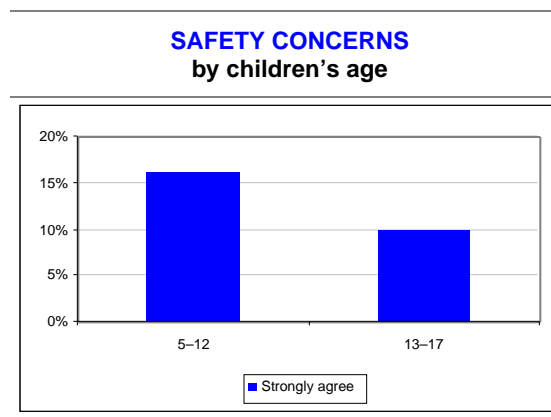
Parents' sex Mothers are as likely as fathers to strongly agree that safety concerns keep their children from walking or bicycling.

Parents' activity level Less active parents are more likely than active parents to hold strong beliefs about safety issues being a barrier to their children's activity.

Implications Safety issues are not perceived as a barrier for most Canadian parents in terms of keeping their children from walking and bicycling. However, earlier research shows that many Canadian parents (56%) believe that having access to safe streets and other public places plays an important role in their children's physical activity.²⁹ Maintaining facilities such as sidewalks, lanes, trails and lighting to local safety standards is also an important factor for childhood safety. Providing a crime-, violence-, harassment-, and vandalism-free environment is also an important component of a safe environment for physical activity.



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POTENTIAL TACTICS TO INCREASE PARTICIPATION



Helping adults to become more active: provide incentives

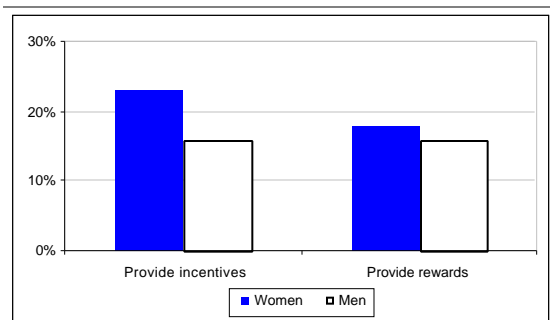
In the previous chapter, we examined perceived barriers to physical activity. This topic and the next five look at the contrary; that is, things which communities, organizations, and agencies can do to try to encourage people to become more active. About one in five adults strongly agree that the provision of incentives (such as certificates for attendance or completion of programs) or the provision of rewards for people who walk or bike a lot would help them become more active. But the majority of Canadians strongly disagree that incentives (51%) and rewards (55%) promote activity.

Age and sex Women are more likely than men to strongly agree that the provision of incentives, such as certificates for attendance, would help them become more active. Adults aged 45–64 are less likely than those younger than 45 to strongly agree that the provisions of incentives would help them become more active. They are also less likely than those aged 25–44 to strongly agree that the provision of rewards would help them become more active.

Activity level Active Canadians are more likely than less active Canadians to strongly agree that the provision of incentives and the provision of rewards would help them become more active.

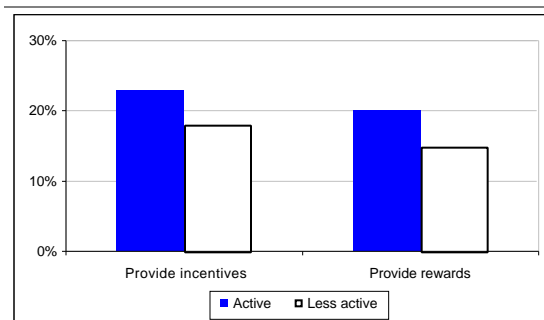
Implications Service providers could consider advertising incentive or reward programs for physical activity through the media to increase awareness.²² Workplaces could promote taking the stairs over elevators and recognize employees who reach stair-climbing targets. Municipalities could partner with workplaces to offer incentive programs for active commuting. Governments could work with insurance agencies to reduce rates for those who are active and fit.²² Workplaces could subsidize memberships to health clubs or recreation facilities both to reduce cost, which may be a barrier for some employees, and to provide an incentive to be active. Retirement homes could offer programs for walking or wheeling and recognize those who attend regularly or who reach specified distance targets.

**PROVISION OF INCENTIVES AND REWARDS
by sex (% agreeing strongly)**



1999 Physical Activity Monitor, CFLRI

**PROVISION OF INCENTIVES AND REWARDS
by physical activity level (% agreeing strongly)**



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Helping adults to become more active: reduce costs

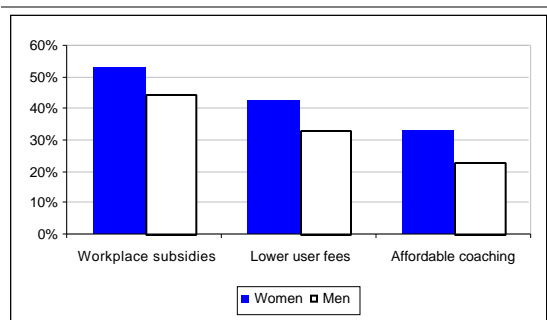
Half of Canadians strongly agree that if their workplace provided employee subsidies for health or fitness memberships, it would help them become more active. Moreover, approximately two in five adults strongly agree that dropping or reducing user fees at places like arenas or swimming pools would help them become more active, and 28% strongly agree that providing affordable instruction and coaching on how to do different sports and physical activity would help. Residents of the Northwest Territories are less likely than Canadians overall to strongly agree that workplace subsidies for memberships would help them become more active.

Age and sex Women are more likely than men to strongly agree that workplace subsidies for health or fitness memberships, dropping or reducing user fees at physical activity locations, and the provision of affordable coaching would help them to become more active. Younger age groups are more likely than older age groups to strongly agree that a reduction in user fees would help them become more active. Similarly, adults under 45 are more likely than those over 45 to agree strongly that workplace subsidies on memberships and affordable coaching would help them become more active.

Activity level Active Canadians are more likely than less active Canadians to strongly agree that workplace subsidies for health or fitness memberships, reduction of user fees at physical activity venues, and affordable coaching would help them become more active.

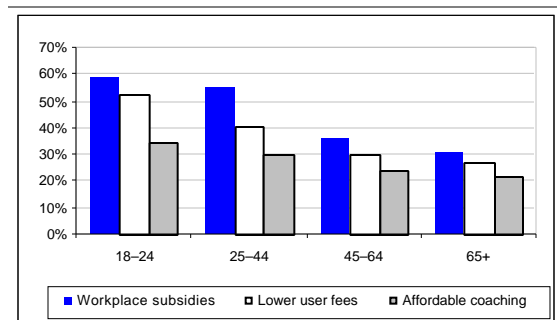
Implications In an earlier topic on barriers to physical activity, one in four Canadians were shown to strongly agree that the cost of physical activity acts as a deterrent to their physical activity. Indeed, this topic reveals that half of the population believes that workplace subsidies would help increase their participation. Workplaces can help their employees to be more active by sponsoring physical activity events, encouraging participation in lunch-time team sports, or providing incentives to employees who actively commute. In addition, walking trails have been shown to be used by women and lower-income earners, two target groups indicating that affordable opportunities would assist them to be more active.³⁰

**REDUCING COSTS OF PHYSICAL ACTIVITY
by sex (% agreeing strongly)**



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**REDUCING COSTS OF PHYSICAL ACTIVITY
by age (% agreeing strongly)**



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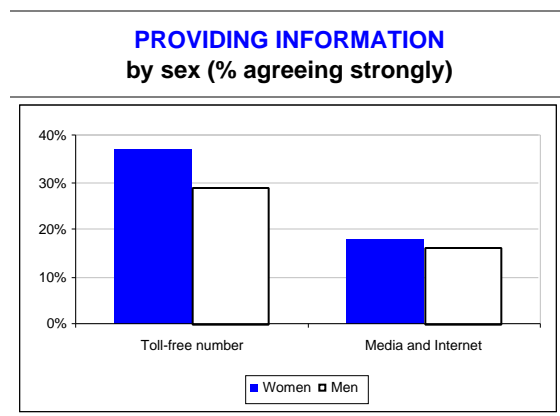
Helping adults to become more active: provide information

One-third of Canadians strongly agree that the provision of a toll-free (1-800) number, which they can call to obtain information on local activities, child care services, and so on, would help them be more active. However, only half as many (17%) adults strongly agree that the provision of more information about physical activity through the media and over the Internet would help them be more active. There are no provincial or territorial differences for these factors across Canada.

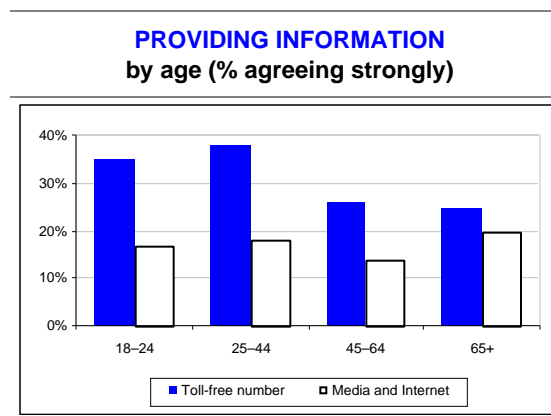
Age and sex Women are more likely than men to strongly agree that a toll-free telephone number providing local information related to physical activity would contribute to their becoming more active. Adults aged 18–44 are more likely than those over 45 to agree strongly that a toll-free number providing information would help them be more active.

Activity level Active Canadians are more likely than less active Canadians to strongly agree that a toll-free number providing information related to physical activity would help them be more active.

Implications Although relatively few Canadians say that more information via electronic media would be helpful, it is important to recall that an earlier topic showed that 57% of Canadians receive physical activity information through the media, including newspaper, television, and radio. The type rather than the amount of information is key. For example, municipalities may wish to take advantage of these media to promote their physical activity programs and opportunities, schedules, lists of community resources, skill development and registration information. In contrast, a toll-free number is more appropriate for providing information on the age-specific short- and long-term benefits of being active. Self-instruction videos or printed materials may help individuals who wish to try physical activities on their own.³¹ In all cases, the usefulness of information will be enhanced by providing links to local-level opportunities to be active.



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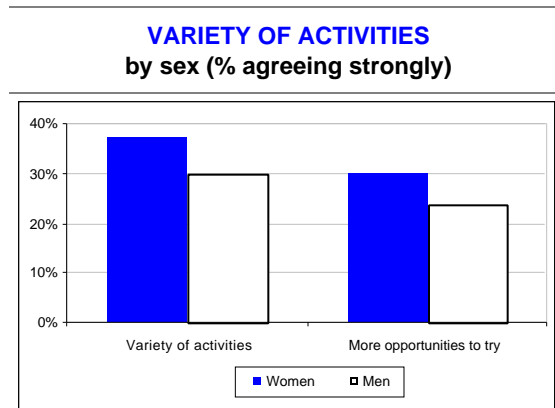
Helping adults to become more active: provide a variety of activities

One-third of Canadian adults strongly agree that the provision of a wide variety of activity programs, facilities, and places to be active would help them become more active, and 27% strongly agree that the provision of more opportunities for them to try out different activities would encourage their participation.

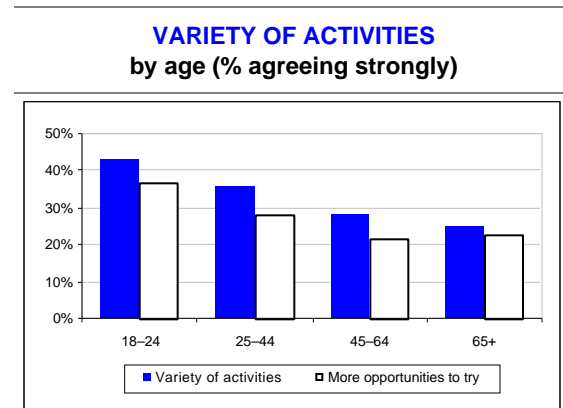
Age and sex Women are more likely than men to strongly agree that a wider variety of activity programs, facilities, and places to be active and more opportunities for them to try out different activities would help them to become more active. Adults under 45 are more likely than their older counterparts to strongly agree a wider variety of activity programs, facilities, and places would help them become more active. Younger Canadians (aged 18–24) are more inclined than older ones to strongly agree that more opportunities to try different activities would help them be more active.

Activity level Active Canadians are more likely than less active Canadians to strongly agree that a wider variety of activities and more opportunities to try different activities would help them to become more active.

Implications Organizing municipal events or open houses can provide residents with the opportunity to observe a variety of physical activities or even try the activities before registering for classes. Opportunities should be geared to beginners, with coaching or instruction appropriately targeted to a range of age and ability levels. Service providers should also evaluate their programs in terms of scheduling, accessibility, and convenience for women and older adults to reduce factors that may be limiting the apparent choices of programs and facilities.



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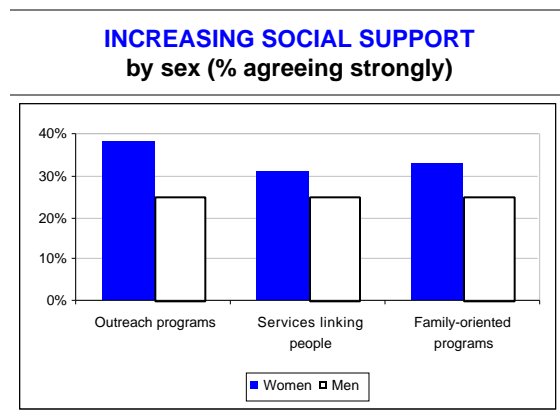
Helping adults to become more active: increase social support

According to Canadians, increasing outreach programs, networking, and family-oriented programs would help them to become more active: 31% strongly agree that if communities provided outreach programs to help people be active at home, work, or school, it would help them to be more active; 28% strongly agree that the provision of services that link people up with other people who want to be active would help them be more active; and 29% also strongly agree that if there were more family-oriented programs and classes, it would help them become more active. Newfoundlanders are more likely than Canadians overall to strongly agree with the last statement.

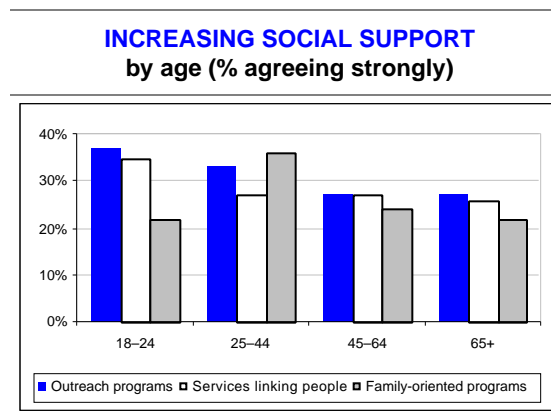
Age and sex Women are more likely than men to strongly agree with all three social support factors as means of helping them become more active. Young adults aged 18–24 are more likely than adults over 25 to strongly agree that services that link up people who want to be active would help them become more active. Adults aged 25–44 are more likely than all other age groups to strongly agree that more family-oriented programs and classes would contribute to their becoming more active.

Activity level A sizable number of Canadians report that these types of social support would help them to become more active irrespective of their activity level.

Implications Service providers can build social support and help to network individuals by building group cohesion in physical activity classes and encouraging people to ask for support from important people in their lives, such as spouses or partners, children, friends, family, or co-workers. Providing child care services or increasing family-oriented programming may decrease scheduling difficulties and indirectly increase social support among other family members. Innovative ways are required for service providers to deliver adequate instruction for physical activity and provide appropriate physical activity facilities, not only in larger urban and central facilities but also in smaller or rural communities.³¹ Outreach services include providing appropriate instruction through a variety of settings, featuring age-sex and culturally appropriate role models, and providing opportunities for adults to observe physical activity behaviours and activities prior to engaging in the activity themselves. These services may help build confidence and act as a teaching mechanism for performing that activity.³²



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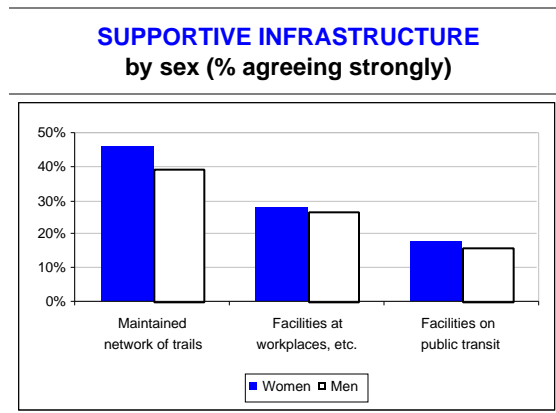
Helping adults to become more active: build a supportive infrastructure

Three aspects of a supportive infrastructure are examined in the 1999 Physical Activity Monitor. More than two in five adults strongly agree that if their community maintained a well-linked network of trails and paths, it would help them become more active. Just over one-quarter strongly agree that if supportive facilities were provided, such as showers, bicycle racks, and lockers at schools, workplaces, and community centres, it would help them be more active. Finally, 17% agree strongly that the provision of ski racks, bicycle carriers, and such on buses and other public transportation would contribute to a regular pattern of physical activity.

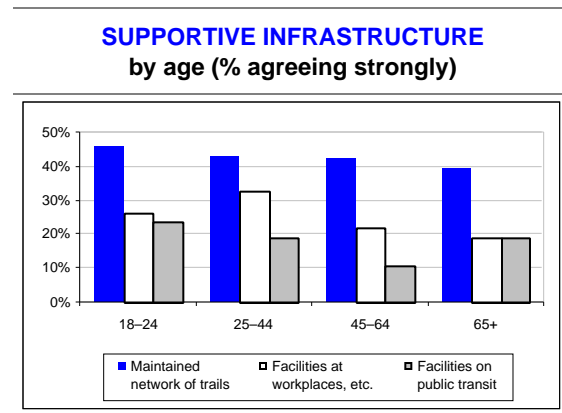
Age and sex Women are more likely than men to strongly agree that the maintenance of a well-linked network of trails and paths would support their activity. Adults aged 25–44 are more likely than all other age groups to strongly agree that more supportive facilities, such as showers, bike racks, and lockers at school, community centres, and workplaces, would help them become more active. Furthermore, adults aged 45–64 are less likely than other adults to strongly agree that ski racks and bicycle carriers on public transportation would promote their activity.

Activity level Active Canadians are more likely than less active Canadians to strongly agree that all these aspects of a supportive infrastructure would promote their activity.

Implications Recent research shows that physical activity levels may be improved if the physical environment is conducive to participation.²² For example, more convenient exercise facilities, safe and well-maintained walking and bicycling paths near people’s homes, and aesthetically pleasing green spaces (including tree-lined paths and trails) are all related to increased participation. Improvements to infrastructure can be facilitated by working with municipal councils to develop pedestrian- and cyclist-centred transportation plans and by-laws governing building codes, suburban development, and retrofitting of communities to favour higher density and mixed-land use (i.e., shops, schools, churches, community centres, workplaces, etc.).



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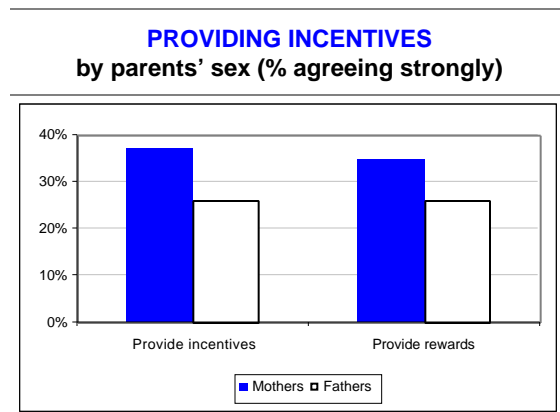
Helping children to become more active: provide incentives

This and the following six topics examine approaches that communities, organizations, and agencies can take to encourage children to become more active. Roughly one-third of parents strongly agree that the provision of incentives—such as certificates for attendance or completion of programs—or the provision of rewards for being active would help their children become more active.

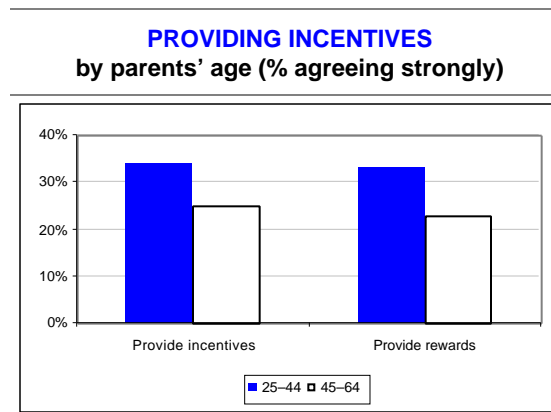
Children's age and sex Parents of 5–12 year-olds are more likely than parents of 13–17 year-olds to strongly agree that rewards, but not incentives, would help their children become more active.

Parents' age and sex Mothers are more likely than fathers to strongly agree that the provision of incentives and rewards would help their children become more active. Younger parents (aged 25–44) are also more likely than older parents (aged 45–64) to strongly agree that rewards, but not incentives, would help their children be more active.

Implications As an incentive, communities could subsidize children's memberships to sport and health clubs or recreation facilities. This subsidy would also reduce cost, which is a barrier to children's participation in these types of facilities, at least for some parents. Municipalities could partner with schools to offer incentive or reward programs for active commuting to and from schools. An example of this type of program was offered by the national organization called Go for Green: the school with the highest percentage of students participating in an "International Walk to School Day" earned a \$500 prize to assist with active transportation initiatives.³³ Service providers or organizations offering incentive or reward programs for physical activity could advertise through the media to increase the public awareness of these programs.²² At an individual level, family members play an important role in helping their children establish physical activity goals. They could be encouraged to provide incentives, rewards, or positive reinforcements when these goals are achieved.³⁴ Ideally, the rewards should be related to physical activity, such as trips to the playground or the swimming pool, or a piece of sport equipment that the child desires.³⁴



1999 Physical Activity Monitor, CFLRI



1999 Physical Activity Monitor, CFLRI

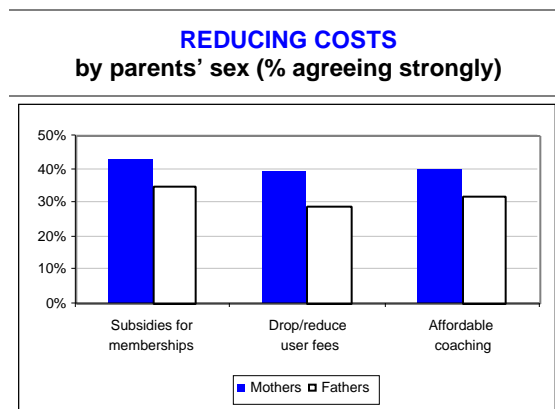
Helping children to become more active: reduce costs

Two out of five parents strongly agree that the provision of subsidized fitness club memberships by communities would help their children become more active. In addition, 35% of parents strongly agree that dropping or reducing user fees at places like arenas or swimming pools would help their children become more active. Finally, 37% strongly agree that providing affordable instruction and coaching on how to do different sports and physical activity would help. There are no provincial or territorial differences for these cost issues.

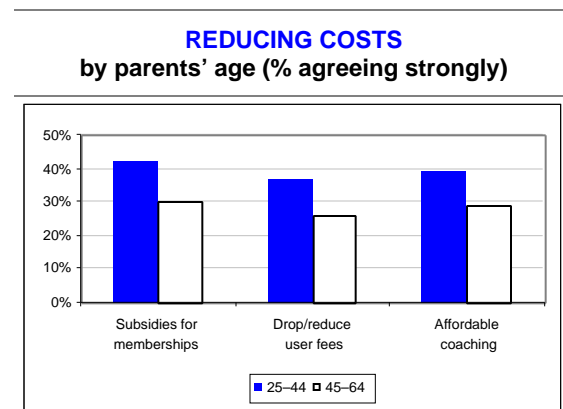
Parents' age and sex Mothers are more likely than fathers to strongly agree that dropping or reducing user fees at physical activity locations and providing affordable coaching would help their children to become more active. Younger parents (aged 25–44) are more likely than older parents (aged 45–64) to strongly agree that subsidizing health or fitness club memberships for children or dropping or reducing user fees would help their children become more active.

Parents' activity level Active parents are more likely than less active parents to strongly agree that the provision of affordable instruction and coaching on how to do different sports and physical activity would help their children become more active.

Implications In an earlier topic on barriers to physical activity, one in four parents strongly agreed that the cost of physical activity acted as a deterrent to their children's physical activity. Again, because user fees are considered a barrier, avoid the use of user fees, especially for low-income households. In addition, schools and facilities could examine cost structures to subsidize children and youth physical activity programs. To ensure affordable instruction and coaching, recruit a broad base of volunteers, who would ideally receive appropriate training, learn specific instruction techniques, and be certified through legitimate coaching organizations like the Coaching Association of Canada.



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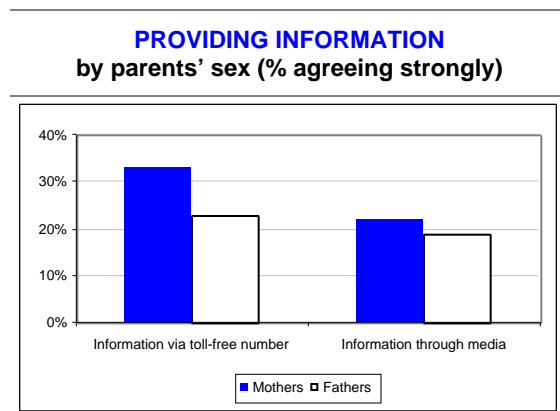
Helping children to become more active: provide information

Almost one-third of Canadian parents strongly agree that the provision of a toll-free (1-800) number, through which they can obtain information on local activities and support services, would help their children be more active. Moreover, one in five parents strongly agree that the provision of more information about physical activity through the media and over the Internet would help their children be more active. There are no provincial or territorial differences for these factors across Canada.

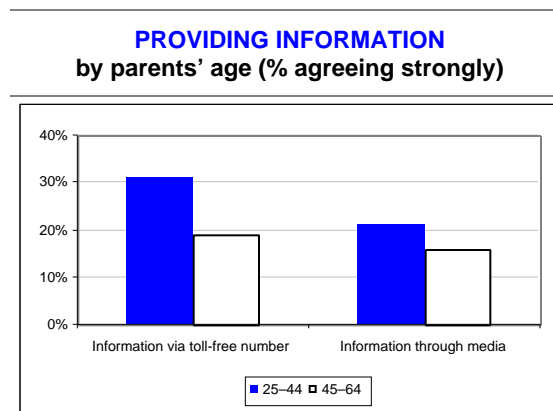
Parents' age and sex Mothers are more likely than fathers to strongly agree that a toll-free telephone number providing local information related to physical activity would help their children become more active. Younger parents (aged 25–44) are more likely than older parents (aged 45–64) to agree strongly that a toll-free number providing local information would help their children be more active.

Parents' activity level Active parents and less active parents hold similar views in terms of information supports.

Implications Communities can take advantage of media, such as local television, radio, newspapers, and the Internet, to promote the physical activity programs and opportunities available for young people in their municipalities. Communities can also use these media to advertise schedules, lists of community resources, and information on skill development and registration. Schools can also become involved in the information exchange on physical activity for children and youth. For instance, they could host workshops for parents who would like to become involved in their children's physical activity programs. These workshops could include printed information and lectures on strategies for promoting physical activity among children; the benefits of physical activity for their children's physical, social, and mental well-being; and the importance of providing good modeling behaviour and reinforcing their children's activity.⁹



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Helping children to become more active: offer a variety of activities

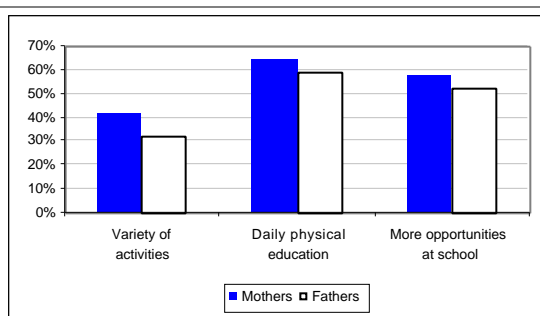
Just over one-third of parents strongly agree that the provision of a wide variety of activity programs, facilities, and places to be active would help their children’s physical activity routine. The majority of parents (62%) strongly agree that if schools provided daily physical education, it would help their children become more active. Just over half of parents strongly agree that the provision of more opportunities at school to participate in different activities would help their children be more active. Quebec parents are less likely than Canadian parents overall to strongly agree with the last statement.

Children’s age and sex Parents of 5–12 year-olds are more likely than parents of 13–17 year-olds to strongly agree that additional opportunities at school and daily physical education would help their children be more active. Boys’ parents are more likely than girls’ parents to strongly agree that additional opportunities at school would help.

Parents’ age and sex Mothers are more likely than fathers to strongly agree that a wider variety of programs, facilities, and places would bolster their children’s involvement in physical activity. Younger parents (aged 25–44) are more likely than older parents (aged 45–64) to strongly agree that additional opportunities at school as well as daily physical education would help their children become more active.

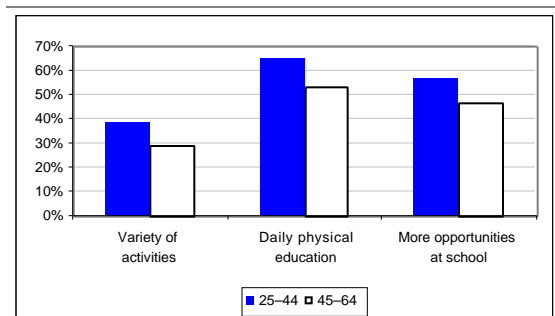
Implications To bolster children’s participation in physical activity and sport, communities could ensure appropriate funding and resources for related programming, services, and facilities.¹⁴ Exposing children to a wide variety of physical activities and sports at school, and seeking their input on activities they would like to try, are an excellent way to encourage participation. Schools can do this through daily physical education programming, structured physical activity programs at recess and lunch periods, intramural and inter-school sport programs, and other extra-curricular physical activities. These types of programs should include a wide variety of both structured and non-structured activities as well as competitive and non-competitive activities, so as to encourage participation by children of all skill and development levels.¹⁴ Schools and communities could seek information from organizations that promote physical education and the integration of physical activity into learning opportunities.

VARIETY OF ACTIVITIES
by parents’ sex (% agreeing strongly)



1999 Physical Activity Monitor, CFLRI

VARIETY OF ACTIVITIES
by parents’ age (% agreeing strongly)



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Helping children to become more active: promote participation

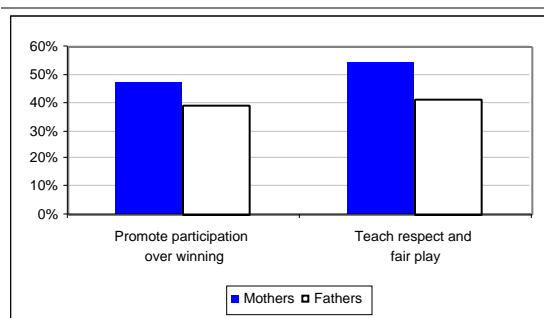
Roughly two out of five parents (44%) strongly agree that emphasizing participation in physical activity programs instead of winning competitions would help their children become more active. Moreover, 48% feel strongly that activity programs that teach children to respect each other and to play fairly would help their children become more active.

Parents' age and sex Mothers are more likely than fathers to strongly agree that emphasizing participation over winning and teaching respect and fair play would help their children become more active. Similarly, younger parents (aged 25–44) are more likely than older parents (aged 45–64) to agree strongly with both statements.

Parents' activity level Active parents are more likely than less active parents to strongly agree that activity programs that help children learn respect and fair play would help their children be more active. Active parents and less active parents hold similar views where emphasizing participation over winning is concerned.

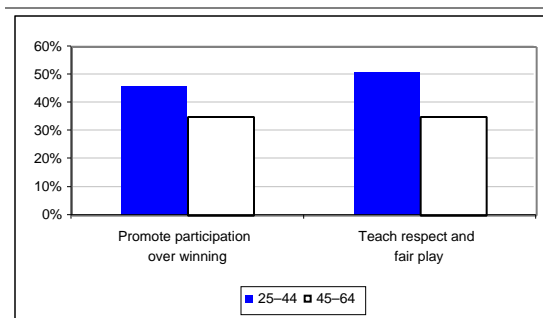
Implications This topic is related to the previous topic concerning the provision of a wide variety of activities to help children become more active. Specifically, communities and schools could promote a wide spectrum of activities and offer a range of non-competitive through competitive options. This enables children of all skill and developmental capabilities to participate in physical activities purely for the fun of participating, rather than for the competitiveness. Every opportunity should be taken to maximize participation in physical activity during physical education classes and sports. When training volunteers to lead children's physical activities, schools, municipalities and sport organizations could seek out resources, such as those available through the Coaching Association of Canada, which describe the importance of enhancing children's self-image and confidence. In addition, these organizations can offer activities that suit children's level of development, create opportunities where children can experience lots of "successes," and focus on the importance of fair play in all sport and activity.³⁵

PARTICIPATION AND FAIR PLAY
by parents' sex (% agreeing strongly)



1999 Physical Activity Monitor, CFLRI

PARTICIPATION AND FAIR PLAY
by parents' activity level (% agreeing strongly)



1999 Physical Activity Monitor, CFLRI

Helping children to become more active: increase social support

According to Canadian parents, increasing outreach programs, networking, and family-oriented programs would help children to become more active: 31% strongly agree that if communities provided outreach programs to help children be active at home or at school, it would help their children to be more active; 34% of parents strongly agree that the provision of services that link children up with other children who want to be active would help; and 37% strongly agree that more family-oriented programs and classes would help their children become more active.

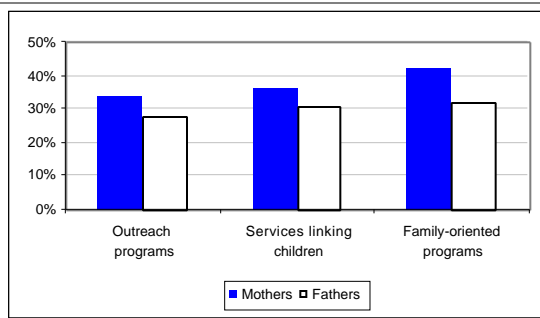
Children's age Parents of 5–12 year-olds are more likely than parents of 13–17 year-olds to strongly agree that more family-oriented programs and classes would help their children become more active.

Parents' age and sex Mothers are more likely than fathers to strongly agree that more family-oriented programs and classes would help their children become more active. Younger parents (aged 25–44) are more likely than older parents (aged 45–64) to strongly agree that networking services and family-oriented programming would help their children become more active.

Parents' activity level Active parents are more likely than less active parents to agree strongly that networking services and family-oriented programming would bolster their children's physical activity routine.

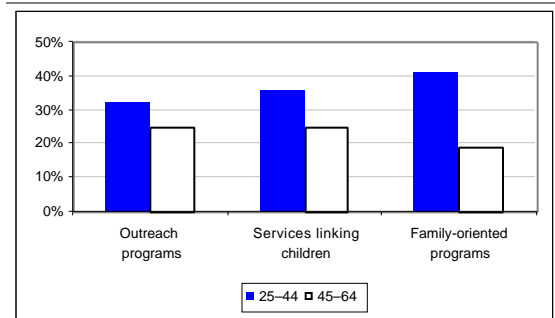
Implications Children's social support network, mainly parents, siblings, peers, and friends, plays an important role in their physical activity behaviours.^{11,14} One aspect of building peer support is positioning physical activity as "cool"—more research on this is needed. Other supportive networks, including support groups, help lines, clubs, and family programming, offer other good opportunities for children and youth to obtain guidance in setting their physical activity goals.²⁷ Outreach programs should present age-, gender-, and culturally appropriate role models and provide opportunities for children to observe physical activity behaviours and activities prior to engaging in a given activity. These strategies may help build confidence for performing specific activities.

**INCREASING SOCIAL SUPPORT
by parents' sex (% agreeing strongly)**



1999 Physical Activity Monitor, CFLRI

**INCREASING SOCIAL SUPPORT
by parents' age (% agreeing strongly)**



1999 Physical Activity Monitor, CFLRI

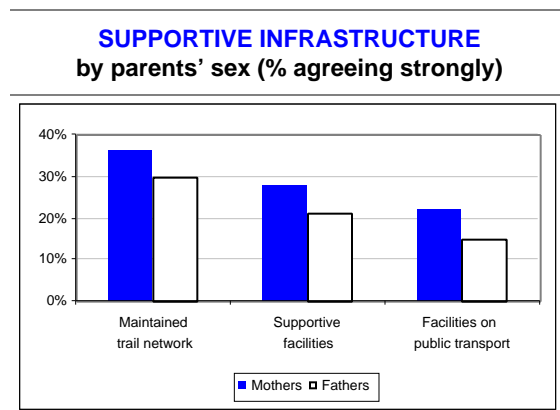
Helping children to become more active: create supportive infrastructure

One-third of parents strongly agree that the maintenance of a well-linked network of trails and paths by the community would help their children to be more active. One-quarter strongly agree that supportive facilities—such as showers, bicycle racks, and lockers at schools, workplaces, and community centres—would help their children be more active. Finally, one-fifth agree strongly that the provision of ski racks, bicycle carriers, and such on buses and other public transportation would contribute to their children’s regular physical activity regime.

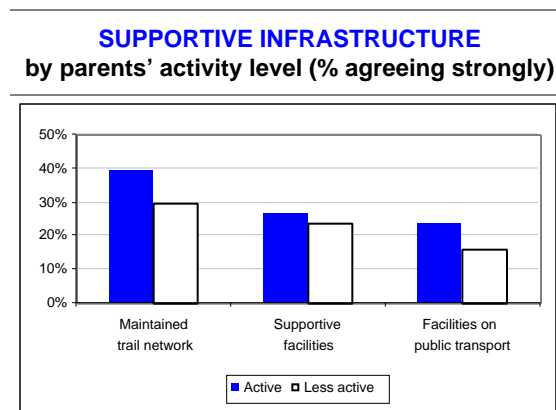
Parents’ age and sex Mothers are more likely than fathers to agree strongly that the provision of ski racks, bicycle carriers, and such on buses and other public transportation would contribute to their children’s increased participation. There are no differences between younger parents and older parents in this respect.

Parents’ activity level Active parents are more likely than less active parents to agree strongly that the provision of ski racks, bicycle carriers, and such on buses and other public transportation would contribute to their children being more active.

Implications For adults and children alike, research shows that physical activity levels may be improved if the physical environment is supportive. A supportive environment can take the form of more convenient facilities, safe and well-maintained walking and cycling paths near people’s homes, and pleasant places to be active.²² Governments can adopt policies that favour a supportive environment for physical activity, such as ensuring mixed land use to encourage active commuting near residential areas, offering economic relief or incentives to new developments (residential and commercial) that include physical activity facilities into their development planning, and donating park and recreational lands as part of land development opportunities.⁹



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MAKING A DIFFERENCE



Creating more supportive environments for physical activity

The environment plays an important role in developing healthy behaviours. Certain factors in the environment can have a restrictive effect on the physical activity behaviours of an individual, and some factors can facilitate physical activity behaviour. These environmental determinants can include a variety of social, physical, and institutional factors.²⁷ Social factors can involve social support, such as from spouses or partners, peers, friends, parents, siblings, work colleagues, incentives, rewards, role models, networking, and so on.²⁷ The physical environment includes climate and weather, geography, the physical make-up of the community, availability of facilities, and physical access to facilities.²⁷ Finally, institutional factors involve the policies, procedures, programs, and rules adopted by the key settings for physical activity, such as communities, workplaces, and schools.²⁷

To encourage a change in physical activity behaviour, a balanced approach to intervention strategies is important: it must include both individual factors, such as a positive intention to modify behaviour and develop the skills to achieve the behaviour, and available and accessible environmental supports, which facilitate behaviour change.³ The last Benchmarks report, *Increasing physical activity: Creating effective communications*,² examined the role of social marketing in physical activity promotion and the role of communication strategies in building awareness, knowledge, motivation, and intention of physical activity. In this report, the data from the 1999 Physical Activity Monitor explore Canadians' access to physical activity information and opportunities in their communities and systemic factors influencing their participation in physical activity. The latter environmental factors include barriers to physical activity for adults and children, as well as factors that would help Canadian adults and children become more active.

Providing a variety of opportunities

Many Canadians believe that the provision of a wide variety of activity programs, facilities, and places to be active, along with an increase in opportunities for trying out different activities, would help them become more active. Furthermore, many parents believe that the provision of a wide variety of activity programs, facilities, and places to be active, the provision of more opportunities at school to participate in different physical activities, and the provision of daily physical education would help their children to become more active.

A variety of opportunities can encourage Canadians to become more active:

- ✓ Provide a variety of activities including both structured versus non-structured types of activities and competitive versus non-competitive activities. This will encourage participation by people of all skill, development, and confidence levels. This is of particular relevance to less active individuals, older adults, and women, who report a stronger perception that their lack of skill and ability to do physical activity and sport is a barrier to participation in physical activity.

- ✓ Individuals should be presented with trial opportunities or “activity sampling” for physical activities. Recent research indicates that half of adults observe or try some kind of physical activity to see if they might like to do it on a regular basis.² This may help less active individuals, women, or older adults to overcome feelings of discomfort, lack of skill, or lack of confidence in their ability to engage in new physical activities.
- ✓ Service providers could consider advertising incentive or reward programs for physical activity through the media to increase awareness.²²
- ✓ Schools can expose students and staff to a comprehensive curriculum of physical activity, including daily physical education programming, structured and unstructured physical activity programs at recess, at lunch, and after school, or intramural and inter-school sports programs.
- ✓ Schools can seek input from students in the course of their involvement or participation in the development, organization, and, for older children, the administration of extracurricular activities that would further enhance their interest and participation in physical activity.²⁷
- ✓ Schools could consider asking municipal recreation departments to assist them with after-school programs.
- ✓ Encourage and provide coaching or instruction for physical activities that are appropriately targeted for a range of age and ability levels. Again, this is particularly important for inactive individuals, older adults, women, and children. Encourage different levels of instruction, including trial and beginner classes.
- ✓ Explore programs or opportunities of particular interest to women and girls.
- ✓ Provide a variety of family-, group-, and individual-oriented programming in the community. The variety of programming will appeal to different segments: family-oriented programming will be more important for 25–44 year-olds, who perceive child care issues and lack of time as major barriers;²⁵ group-oriented programming may appeal more to women or young adults, who perceive a lack of partner as more of a barrier to their physical activity;²⁵ and individual-oriented programming will be appropriate for inactive Canadians, who are more likely to report feeling uncomfortable about physical activity.²⁵ This lack of self-confidence or self-efficacy may prevent less active adults from engaging in physical activity with others whom they perceive as more skilled.
- ✓ Workplaces can also encourage a variety of activities by providing on-site facilities for physical activity and supporting facilities such as showers, change rooms, or lockers, and by encouraging unstructured forms of physical activity such as taking the stairs, bicycling to work, or taking walking breaks.
- ✓ Workplaces could subsidize memberships to off-site health clubs or recreation facilities both to reduce cost, which may be a barrier for some employees, and to provide an incentive to be active.

- ✓ Prominently display signs in buildings and facilities showing the location of stairs, especially just outside of elevators and escalators. Research has shown that a “point-of-decision” prompt, such as visible signage encouraging physical activity like taking the stairs, can represent both an effective and economical way of increasing physical activity and deterring inactive behaviour.³⁶ (Point-of-decision interventions are designed to change the environment in order to influence people to make active, instead of inactive, decisions or choices.)
- ✓ Because home is the most frequent location for physical activity for children, parents can encourage children to be active at home by providing or supporting opportunities to engage in a variety of physical activities in this setting. This should be supported by the reduction or elimination of more sedentary behaviours, including television viewing or video games. The television viewing habits of children need to be reviewed on a regular basis by parents, as television viewing has been associated with obesity.^{34,37}
- ✓ Children are typically more active outdoors than indoors. When engaged in outdoor play, the “temptations” toward more sedentary activities such as television viewing, video games, and computer activity are reduced, thereby encouraging more active play.³⁷
- ✓ Physical activity programs should introduce and promote key concepts to children and youth, including teamwork, discipline, leadership, participation, and fair play.
- ✓ Retirement homes could offer programs for walking or wheeling and recognize those who attend regularly or who reach specified distance targets.

Increasing social support

- ✓ Parents should encourage their children to be active. Research shows that parental encouragement is correlated with higher levels of physical activity in children. There also appears to be a strong relationship between adolescent physical activity and parental support in the form of verbal support and support by other means, including payments, transportation, etc.³⁸
- ✓ Besides providing a supportive environment, parents can also play a role by modelling appropriate physically active behaviour, helping their children establish physical activity goals, and reinforcing physical activity with rewards when goals are achieved.
- ✓ Parents should be encouraged to organize family activities that include physical activity and to support their children’s physical activity in the school environment.
- ✓ Teachers, coaches, and instructors should also encourage and support physical activity by providing counselling and advice and by promoting physical activity through their communications with their students. School personnel are in an influential position to act as role models for appropriate physical activity behaviour.³⁹

- ✓ Health care providers should encourage patients to participate in a healthy and physically active lifestyle.
- ✓ Encourage social support for women and less active adults in particular, who perceive lack of support, lack of a partner, and lack of child care as major barriers.²⁵
- ✓ Promote networking to encourage active individuals to “buddy” up with other people who want to be active in the community.
- ✓ Provide outreach services as well as appropriate instruction through a variety of settings, featuring age-, sex-, and culturally appropriate role models, and providing opportunities for adults to observe physical activity behaviours and activities prior to engaging in the activity themselves.

Creating more supportive environments in the sport and recreation system

Canadians have indicated that lack of information on local physical activities, inconvenient scheduling, difficulty getting to places to be active, lack of skill, excessive cost, and safety concerns are reasons why they do not participate more in physical activity. Service providers in the sport and recreation system could assist in overcoming such barriers by understanding the needs of their local residents and modifying their opportunities to accommodate these needs.

Addressing concerns and perceived barriers of participants

Whether a person is active or not is influenced by numerous factors. Intention to be active and perceived barriers toward physical activity are key factors that predict participation in physical activity now and in the future. To increase physical activity among Canadians, the sport and recreation system must implement interventions that address perceived barriers to physical activity such as safety, cost, access issues, etc.:

- ✓ Address access to facilities and safety issues, particularly for older adults and women.⁴⁰
- ✓ Reduce perception of cost associated with physical activity by offering “pay-as-you-go” payment of physical activity-related fees, reduced user fees for low-income households, or alternatives to paying fees (including services in lieu of payment).
- ✓ Provide facilities that support family-oriented programming. For example, provide safe and affordable child care programs in facilities where parents can do their own physical activities or arrange or organize car pools that enable only one parental resource to transport children to physical activities so that the other parents can participate in physical activity during the same time slot.
- ✓ Evaluate programs regularly in terms of scheduling, accessibility, safety, and convenience to reduce factors that may be limiting the apparent choices available of programs and facilities. These appear to be a more important issue for women and older adults.
- ✓ Research has shown that the physical activity levels of young children tend to be associated with weather patterns and climate change.¹² For example, their activity levels are average in the spring, increase dramatically in the summer, and fall in the autumn and winter months. Strategies within the community, home, and school environments can incorporate seasonal activities or accommodate these seasonal patterns by providing appropriate facilities during the months when children’s activities are typically in decline. This can include a focus on activities such as cross-country skiing, ski trips to local ski facilities, indoor soccer training, basketball, early-morning or after-school walking clubs in the halls, and so on.

- ✓ Overcome the perceived lack of skill by providing instruction for activities that range from not competitive at all to competitive. For the relatively non-competitive activities, the focus should be on the importance of participation, the benefits of the activity, skill development or acquisition, and an atmosphere of fair play. While important for individuals of all skill levels, the shift in focus from “winning” to “participating” takes the pressure of the activity off of those who have lower self-confidence or self-efficacy.

Increase awareness of physical activity programs, services, and facilities in local communities

To encourage Canadians to increase their use of programs, services, and facilities,

- ✓ Municipalities can promote and support active lifestyles by maintaining safe walking environments in their communities. Since walking is considered by many to be an activity of low cost, low skill, and little risk of injury, it is an ideal activity for less active people, women, older adults, and lower income Canadians.
- ✓ Promote and support bicycling by enforcing cyclist safety in mixed traffic; expanding and integrating bike path networks with current municipal infrastructure; maintaining or increasing the security features for bicycling, such as adequate lighting and maintenance of roads, bike paths, lanes, and trails; and providing safe, bicycle-friendly parking, storage, or facilities. In one survey, streets with bicycle lanes or marked bicycle routes were reported to have about half the risk of local streets, and bicycle paths were reported to be even safer.²¹ Therefore, communities may want to ensure bicyclist safety by expanding cycling networks and developing lanes that are completely separate from vehicle traffic. In the case where such lanes do not exist, municipalities can focus on enforcing strict vehicle adherence to road sharing, thus increasing the safety of cyclists in mixed traffic.

Increase opportunities for physical activity in local communities

- ✓ Municipalities and communities can encourage “passive” interventions, by making changes in the environment that do not require individuals to make “active” decisions.⁴¹ These can include making stairs accessible and convenient, restricting some streets for walking or bicycling only, or encouraging mixed land use (business, residential, shopping, etc.) in new community developments, which fosters active commuting to local facilities.⁴¹
- ✓ Facilities in the sport and recreation system should be seen as convenient, safe, accessible, and affordable.
- ✓ Provide a system of safe trails, including well-lighted and secure paths and trails, secure areas for locking bicycles, and so on.⁴¹
- ✓ Earlier research shows that many Canadian parents (56%) believe that having access to safe streets and other public places plays an important role in their children’s physical activity.²⁹ Maintaining facilities such as sidewalks, lanes, trails, and lighting

to local safety standards is also an important factor for childhood safety. Providing a crime-, violence-, harassment-, and vandalism-free environment is also an important component of a safe environment for physical activity.

- ✓ Ensure that teachers and early childhood educators (including preschool, nursery, and day-care instructors) receive appropriate training in age-appropriate motor development, movement, play, health-related fitness, or guidelines for all children.¹² In addition, these educators should understand the importance of physical activity during the early years and know how to incorporate physical activity into their curriculum. Health Canada and the Canadian Society for Exercise Physiology are expected to release guidelines for physical activity for children and youth in the near future. It is anticipated that these guidelines would be similar in format to those released since 1998 for adults and older adults.^{8,42}
- ✓ Support physical activity among young children by ensuring that day-care facilities, preschool facilities, and nursery schools are equipped with an appropriate variety of safe equipment and facilities to assist motor skill development and physical activity.¹² This includes indoor and outdoor opportunities (e.g., balls, hoops, balance beams, jump ropes, hopscotch and other game facilities, playgrounds, slides, swings, climbing apparatus, and so on). Again, it is important to provide a balance of both structured and unstructured play opportunities. With 64% of Canadian households having two parents employed in 1998,⁴³ many Canadian households use day-care services. It is therefore important that parents and caregivers communicate openly about children's physical activity requirements, set physical activity goals, and agree on how these goals will be met.
- ✓ Consider establishing physical activity standards through provincial and territorial day-care legislation.

Link messages on how to become more active with opportunities in the sport and recreation system

With Canadians generally being aware of physical activity information (two-thirds of Canadian adults report that there is a lot of information on physical activity and sports available in their community), it is important to tie this information to facilities in the community. For example,

- ✓ Provide incentives, such as certificates of achievement or participation, or rewards, such as discounts in registration fees, to participants who attend classes or use facilities regularly. Alternatively, municipalities can consider holding media-promoted contests with associated rewards to encourage facility use (such as bicycle trails). Of course, contests alone would probably not sustain a behaviour change, but would have to be combined with prompting, awareness of benefits, and so on.⁴⁴
- ✓ Service providers can use health promotion programs to provide counselling on various aspects of physical activity. Topics can include the benefits of physical activity, how to overcome barriers to physical activity, how to develop goals, how to

establish a personal physical activity program, opportunities for physical activity in the community, injury prevention, and so on.

- ✓ Sports and recreation facilities and communities may consider using local media to advertise schedules, lists of community resources, and information on skill development and registration. Municipalities may also want to consider a toll-free number for providing information on the age-specific short- and long-term benefits of being active, as one-third of Canadians strongly believe that such a service would be beneficial in helping them become more active.
- ✓ Provide specific messages when dealing with different segments of the population (a global message is appropriate for strategies aimed at the general population but targeted messages are best for reaching specific groups). For example, when customizing messages for individuals, service providers can focus more on what is required or involved in the activities—for youth, focus on physical activity as “cool”; for adults in their thirties, focus on how they can find time to do physical activity; for older adults, focus on trying physical activity and stress its potential for companionship and maintaining independence.⁴⁵
- ✓ Encourage the use of technology when implementing physical activity interventions. For national and provincial governments and organizations who are promoting population-based interventions, it is important to communicate cost effectively to large numbers of individuals.⁴⁶ For example, an effective strategy for communicating with the population, especially those who are insufficiently active, may be to use a “proactive” approach by directly reaching the population and offering a particular service, combined with the use of the Internet.⁴⁶
- ✓ Municipalities can link up with existing resources to obtain information on available programs, services, and facilities. Some helpful resources include:
 - 1) TrailPAQ. Go for Green, a national organization, spearheaded an electronic initiative called TrailPAQ, which provides a wealth of information on Canadian trails. This Web site (www.trailpaq.com) boasts a national inventory of established local trails in Canada, a bulletin board where users can post questions on trail development, an electronic newsletter on trails, information on issues, benefits, and so on;²³
 - 2) SummerActive. Health Canada and provincial and territorial governments sponsor physical activity opportunities, including SummerActive, a yearly campaign in late spring–early summer to promote and increase physical activity. A national SummerActive Internet site (www.summeractive.canoe.ca) contains practical and ready-to-use information and resources, enabling community leaders and the media to access leading-edge public education and promotion materials supporting local SummerActive activities (newspaper and magazine PSAs, pre-recorded radio PSAs and announcer-read scripts, posters and print promotional materials, and event leader “how-to” resources);

- 3) An inventory of physical activity facilities. The National Recreation and Parks Association in the United States has established a comprehensive Web database following an approach resembling Go for Green’s trail inventory. This resource allows individuals to search for information on all types of physical activity facilities, such as swimming pools, arenas, etc., for different cities and states within the United States.⁴⁷ While this resource only applies to the United States, it provides a striking example of how technological initiatives can increase the information resources available to service providers.
- ✓ Municipalities could link up with other municipalities—electronic interactions may be the most economical—in order to share innovative ideas, lessons, samples, and “success” stories for how they have been able to incorporate physical activities into their programs and services.
 - ✓ Municipalities can create a database of best practices for sport and recreation, clearly identifying why the program is a best practice, any issues involved in implementing the program, and the program’s impact, so that other municipalities can determine its applicability and relevance to their own situation.

Community mobilization for encouraging physical activity

Strategies should target key settings, like workplaces, schools, communities, and health care facilities, to reach large segments of the population and to change and enhance supportive environments, policies, and programs in order to reinforce behaviour change.

Intervention strategies for increasing physical activity should involve several key settings, such as workplaces, schools, communities, and health care facilities. For example,

- ✓ Workplaces can develop policies to encourage physical activity such as flextime for physical activity, casual attire days, or incentives and rewards to recognize employees who actively commute.
- ✓ Workplaces can help their employees to be more active by sponsoring physical activity events and encouraging participation in lunch-time team sports.
- ✓ Encourage workplaces to partner with local community facilities to allow their employees to access these types of facilities before work, during lunch hour, after work, etc. if on-site exercise facilities are not available at the workplace. Workplaces may also want to consider subsidies for these facilities, as half of Canadians report that they would be more active if such subsidies were in place.
- ✓ Encourage workplaces to link up with other workplaces in the community that have implemented successful physical activity programming. Encourage interaction to share innovative ideas, success stories, and lessons learned from their experiences.
- ✓ Ensure that schools also have appropriate facilities, equipment, and supplies to meet the physical activity requirements of their students. This will help to ensure that students are not required to “wait their turn” to do an activity and, consequently, be unnecessarily inactive for part of the physical education class.
- ✓ Schools should ensure that students are active for the majority of the time spent in physical education classes.
- ✓ Encourage schools to obtain appropriate tools and resources to promote physical activity.
- ✓ Promote provincial or territorial testing in physical activity for children and youth. Some provinces have adopted mandatory provincial testing for subjects such as literacy.⁴⁸ Similar testing can be introduced for physical activity.
- ✓ Schools can provide more opportunities at recess periods to increase children’s physical activity levels, as research shows that children spend much of their recess time being inactive.⁴⁹ This research also suggests that modifications to school policies such as increasing the frequency of recesses, providing suitable facilities, and educating staff to prompt physical activity may contribute to higher physical activity.

- ✓ Ensure that extracurricular activities not only promote team sports such as basketball, soccer, and volleyball but also encourage physical activity clubs, featuring such activities as dance, yoga, and walking.
- ✓ Ensure that health promotion programs, either in conjunction with or separate from physical education classes, incorporate physical activity topics into the curriculum. Topics can include the benefits of physical activity, how to overcome barriers to physical activity, how to develop goals, how to establish a personal physical activity program, opportunities for physical activity in the community, and so on.
- ✓ Partner municipalities with schools to offer incentive or reward programs for active commuting to and from schools as a means of increasing children’s physical activity levels. An example of this type of program is “International Walk to School Day,” offered through Go for Green to encourage active transportation initiatives.³³
- ✓ Community leaders can help communities establish a network of Neighbourhood Watch programs along paths and trails used for physical activity, in order to alleviate safety concerns.
- ✓ Communities can consider programs that increase physical activity opportunities for low-income families. This can include facilitating transportation to and from physical activities, child care assistance, and fee subsidies or waivers.
- ✓ Provide role models for physical activity in the community.³² For example, highlight local celebrities such as the mayor, city council members, local media personalities, local athletes, and other respected figures in physical activity promotion campaigns.
- ✓ Physicians and health care providers can play a key role in promoting physical activity among adults and children. These health professionals interact with the general public on a regular basis and are typically viewed as a primary and credible resource for health behaviours and issues.⁵⁰
- ✓ Not only can health care providers discuss the benefits of physical activity with their patients, they can also offer an environment that promotes physical activity, through posters, pamphlets, and other types of resources in the waiting and examination rooms.⁵⁰
- ✓ Primary care physicians and professionals should provide counselling of regular physical activity as part of routine visits, to ensure a healthy perspective from the start. Involve parents in the guidance and counselling when appropriate and provide education materials to help patients become knowledgeable and modify behaviour.⁵⁰
- ✓ Provide references to other professionals, such as nutritionists, exercise physiologists, trainers, and physiotherapists, when necessary and appropriate.⁵⁰
- ✓ Physical activity can be an important topic in the curricula of medical schools and associations, thus educating physicians and health care providers on the role of physical activity in disease prevention and on effective counselling with respect to physical activity.⁵⁰

Establish partnerships with municipal and provincial infrastructure departments (such as transport, municipal planning and development boards, urban planners, etc.) to help plan local infrastructures that encourage physical activity.

- ✓ Communities can encourage the use of facilities *not specifically designed* for physical activity, especially in more rural or small communities that do not have access to many physical activity facilities. Communities can make use of schools outside of traditional school hours for other types of activities, including walking clubs, dance classes, team sports, etc. Alternatively, community centres or church halls or basements can be used for activities such as tai chi, yoga, or aerobics classes.
- ✓ School boards, municipalities, and community groups could develop cooperative agreements to share the use of facilities and human resources (e.g., community access to school facilities).
- ✓ Ensure a balance between physical activity routes and public transportation routes. Determine whether public transportation routes support walking or bicycling alternatives, and clearly identify potential hazards for active commuting.
- ✓ Encourage and support bicycle commuting by providing lanes separated from vehicle traffic, designated bicycle lanes, preferential signage, and signage reminding motorists to share the road.
- ✓ Provide an environment conducive to physical activity with linkages to residential, business, and retail areas with a system of well-networked paths and trails.
- ✓ Encourage active commuting by providing an aesthetically pleasing environment, which encourages physical activity. This can include tree-lined streets, green spaces, and so on.
- ✓ Ensure appropriate maintenance of sidewalks and paths to create a safe commuting environment.



APPENDICES



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Difference between two estimates required for statistical significance

1999 Physical Activity Monitor

	Sample	Percentage tested ¹								
		10%	20%	30%	40%	50%	60%	70%	80%	90%
TOTAL, ADULTS (18+)	4,264	1.5	1.9	2.2	2.4	2.4	2.4	2.2	1.9	1.5
women	2,384	2.0	2.6	3.0	3.2	3.3	3.2	3.0	2.6	2.0
men	1,880	2.2	2.9	3.4	3.6	3.7	3.6	3.4	2.9	2.2
18–24	485	4.3	5.8	6.6	7.1	7.2	7.1	6.6	5.8	4.3
women	243	6.1	8.2	9.3	10.0	10.2	10.0	9.3	8.2	6.1
men	242	6.1	8.2	9.4	10.0	10.2	10.0	9.4	8.2	6.1
25–44	1,965	2.1	2.9	3.3	3.5	3.6	3.5	3.3	2.9	2.1
women	1,067	2.9	3.9	4.5	4.8	4.9	4.8	4.5	3.9	2.9
men	898	3.2	4.2	4.9	5.2	5.3	5.2	4.9	4.2	3.2
45–64	1,236	2.7	3.6	4.1	4.4	4.5	4.4	4.1	3.6	2.7
women	705	3.6	4.8	5.5	5.9	6.0	5.9	5.5	4.8	3.6
men	531	4.1	5.5	6.3	6.8	6.9	6.8	6.3	5.5	4.1
65+	578	4.0	5.3	6.1	6.5	6.6	6.5	6.1	5.3	4.0
women	369	5.0	6.6	7.6	8.1	8.3	8.1	7.6	6.6	5.0
men	209	6.6	8.8	10.1	10.8	11.0	10.8	10.1	8.8	6.6
REGION										
East	1,310	2.6	3.5	4.0	4.3	4.4	4.3	4.0	3.5	2.6
Newfoundland	253	6.0	8.0	9.2	9.8	10.0	9.8	9.2	8.0	6.0
Prince Edward Island	254	6.0	8.0	9.1	9.8	10.0	9.8	9.1	8.0	6.0
Nova Scotia	258	5.9	7.9	9.1	9.7	9.9	9.7	9.1	7.9	5.9
New Brunswick	545	4.1	5.4	6.2	6.7	6.8	6.7	6.2	5.4	4.1
Quebec	367	5.0	6.6	7.6	8.1	8.3	8.1	7.6	6.6	5.0
Ontario	958	3.1	4.1	4.7	5.0	5.1	5.0	4.7	4.1	3.1
West	1,144	2.8	3.8	4.3	4.6	4.7	4.6	4.3	3.8	2.8
Manitoba	346	5.1	6.8	7.8	8.4	8.5	8.4	7.8	6.8	5.1
Saskatchewan	262	5.9	7.9	9.0	9.6	9.8	9.6	9.0	7.9	5.9
Alberta	280	5.7	7.6	8.7	9.3	9.5	9.3	8.7	7.6	5.7
British Columbia	256	6.0	7.9	9.1	9.7	9.9	9.7	9.1	7.9	6.0
North	590	3.9	5.2	6.0	6.4	6.5	6.4	6.0	5.2	3.9
Northwest Territories	348	5.1	6.8	7.8	8.3	8.5	8.3	7.8	6.8	5.1
Yukon	242	6.1	8.2	9.4	10.0	10.2	10.0	9.4	8.2	6.1
ENERGY EXPENDITURE										
Active (> 3 KKD)	1,827	2.2	3.0	3.4	3.6	3.7	3.6	3.4	3.0	2.2
Moderately active (1.5–2.9)	1,098	2.9	3.8	4.4	4.7	4.8	4.7	4.4	3.8	2.9
Somewhat active (0.5–1.4)	817	3.3	4.4	5.1	5.4	5.6	5.4	5.1	4.4	3.3
Sedentary (<0.5 KKD)	609	3.9	5.1	5.9	6.3	6.4	6.3	5.9	5.1	3.9

¹ The difference between two numbers is statistically significant when it is greater than or equal to the value listed in the table beside the appropriate group. For example, let 41% of men and 32% of women be considered active. Is the difference (9) significant? To find out, take the lower percentage (32%) and find out the difference required to achieve significance for the corresponding group (women). The value indicated at the intersection of the nearest percentage column and the group row (3.0) is the difference required to achieve significance. Since the difference between 32% and 41% is larger than 3.0, it is possible to state that men are significantly more active than women.

Difference between two estimates required for statistical significance

1999 Physical Activity Monitor

	Sample	Percentage tested								
		10%	20%	30%	40%	50%	60%	70%	80%	90%
EDUCATION LEVEL										
Less than secondary	936	3.1	4.2	4.8	5.1	5.2	5.1	4.8	4.2	3.1
Secondary	1,145	2.8	3.8	4.3	4.6	4.7	4.6	4.3	3.8	2.8
College	940	3.1	4.1	4.7	5.1	5.2	5.1	4.7	4.1	3.1
University	1,283	2.7	3.5	4.1	4.3	4.4	4.3	4.1	3.5	2.7
HOUSEHOLD INCOME										
< \$20,000	653	3.7	5.0	5.7	6.1	6.2	6.1	5.7	5.0	3.7
\$20,000–29,999	559	4.0	5.4	6.2	6.6	6.7	6.6	6.2	5.4	4.0
\$30,000–39,999	492	4.3	5.7	6.6	7.0	7.2	7.0	6.6	5.7	4.3
\$40,000–59,999	794	3.4	4.5	5.2	5.5	5.6	5.5	5.2	4.5	3.4
\$60,000–79,999	409	4.7	6.3	7.2	7.7	7.9	7.7	7.2	6.3	4.7
\$80,000–99,999	260	5.9	7.9	9.0	9.7	9.9	9.7	9.0	7.9	5.9
\$100,000	333	5.2	7.0	8.0	8.5	8.7	8.5	8.0	7.0	5.2
EMPLOYMENT STATUS										
Full-time worker	2,163	2.0	2.7	3.1	3.3	3.4	3.3	3.1	2.7	2.0
Part-time worker	462	4.4	5.9	6.8	7.2	7.4	7.2	6.8	5.9	4.4
Unemployed	209	6.6	8.8	10.1	10.8	11.0	10.8	10.1	8.8	6.6
Homemaker	259	5.9	7.9	9.0	9.7	9.9	9.7	9.0	7.9	5.9
Student	236	6.2	8.3	9.5	10.1	10.3	10.1	9.5	8.3	6.2
Retired	709	3.6	4.8	5.5	5.8	6.0	5.8	5.5	4.8	3.6
COMMUNITY SIZE										
< 1,000	525	4.2	5.5	6.4	6.8	6.9	6.8	6.4	5.5	4.2
1,000–9,999	1,103	2.9	3.8	4.4	4.7	4.8	4.7	4.4	3.8	2.9
10,000–74,999	1,144	2.8	3.8	4.3	4.6	4.7	4.6	4.3	3.8	2.8
75,000–299,999	573	4.0	5.3	6.1	6.5	6.6	6.5	6.1	5.3	4.0
300,000	689	3.6	4.8	5.5	5.9	6.1	5.9	5.5	4.8	3.6
FAMILY COMPOSITION										
Living with a partner	2,445	1.9	2.6	2.9	3.1	3.2	3.1	2.9	2.6	1.9
with children at home	1,092	2.9	3.8	4.4	4.7	4.8	4.7	4.4	3.8	2.9
without children at home	1,352	2.6	3.5	4.0	4.2	4.3	4.2	4.0	3.5	2.6
Widowed, divorced, separated	830	3.3	4.4	5.1	5.4	5.5	5.4	5.1	4.4	3.3
with children at home	186	7.0	9.3	10.7	11.4	11.6	11.4	10.7	9.3	7.0
without children at home	643	3.8	5.0	5.7	6.1	6.3	6.1	5.7	5.0	3.8
Never married	1,044	2.9	3.9	4.5	4.8	4.9	4.8	4.5	3.9	2.9
with children at home	152	7.7	10.3	11.8	12.6	12.9	12.6	11.8	10.3	7.7
without children at home	892	3.2	4.3	4.9	5.2	5.3	5.2	4.9	4.3	3.2

Difference between two estimates required for statistical significance

1999 Physical Activity Monitor

	Sample	Percentage tested								
		10%	20%	30%	40%	50%	60%	70%	80%	90%
<i>TOTAL, CHILDREN (1-17)</i>	1,375	2.6	3.4	3.9	4.2	4.3	4.2	3.9	3.4	2.6
girls	631	3.8	5.1	5.8	6.2	6.3	6.2	5.8	5.1	3.8
boys	744	3.5	4.7	5.3	5.7	5.8	5.7	5.3	4.7	3.5
1-4	302	5.5	7.3	8.4	9.0	9.1	9.0	8.4	7.3	5.5
girls	142	8.0	10.7	12.2	13.1	13.3	13.1	12.2	10.7	8.0
boys	160	7.5	10.0	11.5	12.3	12.6	12.3	11.5	10.0	7.5
5-12	618	3.8	5.1	5.9	6.3	6.4	6.3	5.9	5.1	3.8
girls	289	5.6	7.5	8.6	9.2	9.3	9.2	8.6	7.5	5.6
boys	329	5.3	7.0	8.0	8.6	8.8	8.6	8.0	7.0	5.3
13-17	455	4.5	6.0	6.8	7.3	7.4	7.3	6.8	6.0	4.5
girls	200	6.7	9.0	10.3	11.0	11.2	11.0	10.3	9.0	6.7
boys	255	6.0	8.0	9.1	9.7	9.9	9.7	9.1	8.0	6.0

Physical activity levels of Canadians

1999 Physical Activity Monitor

	Active (≥3 KKD ¹)	Moderately active (1.5–2.9 KKD)	Somewhat active (0.5–1.4 KKD)	Sedentary (<0.5 KKD)
TOTAL, ADULTS (18+)	36%	29%	21%	14%
women	32	30	23	15
men	41	28	19	13
18–24	52	31	12	–
women	40	37	16	–
men	64	26	–	–
25–44	36	31	22	12
women	33	32	21	13
men	39	29	22	10
45–64	32	28	22	18
women	31	26	26	16
men	33	30	18	19
65+	27	24	24	25
women	22	25	26	27
men	35	22	20	23
REGION				
East	35	25	23	17
Newfoundland	33	24	23	20
Prince Edward Island	32	28	22	18
Nova Scotia	35	24	24	16
New Brunswick	35	28	23	14
Quebec	28	29	25	18
Ontario	39	29	19	14
West	40	30	19	11
Manitoba	35	34	19	12
Saskatchewan	40	22	19	19
Alberta	38	30	21	11
British Columbia	43	31	17	–
North	49	27	15	8
Northwest Territories	45	25	18	12
Yukon	53	28	14	–

¹ Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Physical activity levels of Canadians (cont'd)

1999 Physical Activity Monitor

	Active (≥3 KKD ¹)	Moderately active (1.5–2.9 KKD)	Somewhat active (0.5–1.4 KKD)	Sedentary (<0.5 KKD)
EDUCATION LEVEL				
Less than secondary	27%	25%	26%	23%
Secondary	35	30	20	15
College	38	31	19	12
University	41	29	20	10
HOUSEHOLD INCOME				
< \$20,000	28	22	23	28
\$20,000–29,999	29	31	24	16
\$30,000–39,999	36	29	19	16
\$40,000–59,999	36	29	24	11
\$60,000–79,999	35	32	21	13
\$80,000–99,999	41	35	15	–
\$100,000	50	30	15	–
EMPLOYMENT STATUS				
Full-time worker	36	29	23	12
Part-time worker	40	35	16	9
Unemployed	23	26	18	32
Homemaker	28	27	26	19
Student	52	32	10	–
Retired	31	24	22	23
COMMUNITY SIZE				
< 1,000	29	27	21	22
1,000–9,999	35	29	23	13
10,000–74,999	39	30	19	13
75,000–299,999	40	31	17	12
300,000	37	29	22	12
FAMILY COMPOSITION				
Living with a partner	34	30	22	14
with children at home	34	32	20	14
without children at home	35	28	23	14
Widowed, divorced, separated	29	23	23	25
with children at home	36	25	29	–
without children at home	27	23	22	28
Never married	44	31	16	10
with children at home	48	21	–	–
without children at home	43	32	15	10

1 Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Trends in physical inactivity since 1981

1999 Physical Activity Monitor

	Not active enough (< 3 KKD ¹)				
	1999	1998 ²	1997 + 1995 ³	1988 ⁴	1981 ⁵
TOTAL, ADULTS (18+)	64%	63%	63%	71%	79%
women	68	67	67	78	83
men	59	59	59	64	76
18–24	48	44	45	62	70
women	60	54	48	73	74
men	36	33	42	51	67
25–44	64	65	61	73	81
women	67	69	65	79	85
men	61	62	57	67	76
45–64	68	64	67	75	83
women	69	64	70	80	84
men	67	64	64	70	83
65+	73	79	78	70	81
women	78	82	80	78	85
men	65	74	76	59	76
REGION					
East	65	69	68	77	82
Newfoundland	67	67	64	–	86
Prince Edward Island	68	73	–	–	87
Nova Scotia	65	69	69	–	78
New Brunswick	65	70	69	–	83
Quebec	72	68	63	75	82
Ontario	61	63	63	72	80
West	60	59	60	67	75
Manitoba	65	63	70	–	80
Saskatchewan	60	63	65	–	79
Alberta	62	58	61	–	74
British Columbia	57	56	55	–	74
North	51	57	n/a	n/a	n/a
Northwest Territories	55	60	60	n/a	n/a
Yukon	47	51	n/a	n/a	n/a

1 Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

2 1998 Physical Activity Monitor.

3 1995 and 1997 Physical Activity Monitor (merged data).

4 1988 Campbell Survey on Well-Being in Canada.

5 1981 Canada Fitness Survey.

– Data unavailable because of insufficient sample size.

Popularity of physical recreation activities, age 18+

1999 Physical Activity Monitor

Rank, 1999	Activity	Percent of population ¹		
		Total	Women	Men
1	Walking for exercise	81%	87%*	75%
2	Gardening, yard work	70	67	74*
3	Swimming	54	53	56
4	Social dancing	46	48	45
5	Home exercise	45	46	44
6	Bicycling	45	39	51*
7	Weight training	29	24	35*
8	Bowling	27	26	28
9	Golf	26	16	36*
10	Jogging, running	25	21	29*
11	Skating	23	20	26*
12	Baseball, softball	19	12	26*
13	Exercise classes, aerobics	18	28*	9
14	In-line skating	18	17	19
15	Basketball	15	10	21*
16	Downhill skiing	14	12	17*
17	Volleyball	14	12	15
18	Badminton	14	12	16
19	Soccer	13	7	20*
20	Tennis	13	9	16*
21	Cross-country skiing	12	12	12
22	Ice hockey	10	3	18*
23	Yoga, tai chi	9	12*	6
24	Football	8	2	13*
25	Ballet, modern dance	6	8	5
26	Snowboarding	4	2	6
27	Squash	4	2	6
28	Racquetball	3	2	4

¹ Percentage of Canadians who participated at least once in given activity within last 12 months.

* Significantly greater than other sex.

- Data unavailable because of insufficient sample size.

Popularity of physical recreation activities, by age

1999 Physical Activity Monitor

	18–24		25–44		45–64		65+	
	Top activities	%	Top activities	%	Top activities	%	Top activities	%
1.	Walking	78	Walking	82	Walking	83	Walking	73
2.	Social dancing	74	Gardening	70	Gardening	80	Gardening	66
3.	Swimming	66	Swimming	63	Swimming	44	Home exercise	38
4.	Home exercise	60	Social dancing	51	Bicycling	41	Swimming	31
5.	Weight training	59	Bicycling	50	Home exercise	39	Social dancing	20
6.	Bicycling	59	Home exercise	47	Social dancing	36	Bicycling	17
7.	Gardening	55	Weight training	33	Golf	23	Golf	14
8.	Jogging, running	53	Bowling	31	Weight training	17	Bowling	13
9.	Bowling	48	Skating	31	Bowling	17	Exercise classes	9
10.	Basketball	45	Golf	30	X-country skiing	17	Yoga, tai chi	9
11.	In-line skating	44	Jogging, running	29	Skating	15	Weight training	9
12.	Baseball, softball	38	Baseball, softball	24	Jogging, running	14	X-country skiing	8
13.	Volleyball	33	In-line skating	22	Exercise classes	12	Jogging, running	6
14.	Golf	32	Exercise classes	21	Badminton	11		
15.	Exercise classes	30	Downhill skiing	18	Downhill skiing	9		
16.	Tennis	30	Volleyball	16	Baseball, softball	9		
17.	Soccer	30	Soccer	16	Yoga, tai chi	8		
18.	Badminton	29	Basketball	16	Tennis	8		
19.	Skating	28	Badminton	14	Volleyball	6		
20.	Football	24	Ice hockey	14	In-line skating	5		
21.	Downhill skiing	23	Tennis	13	Soccer	5		
22.	Ice hockey	19	X-country skiing	12	Ballet, modern dance	5		

Awareness of guidelines for physical activity

1999 Physical Activity Monitor

	Physical effort required		Amount of activity required		Reasons people are not active	
	Vigorous	Moderate, if long enough	Only a little bit occasionally	More is better	Too hard to start	They think it's too hard but it isn't
TOTAL, ADULTS (18+)	11%	89%	8%	92%	17%	83%
women	8	92	7	93	19	81
men	14	86	8	92	16	84
18–24	14	86	–	92	15	85
women	–	89	–	94	24	76
men	18	82	–	90	6	94
25–44	12	88	7	93	16	84
women	8	92	8	92	18	82
men	15	85	6	94	15	85
45–64	8	92	7	93	19	81
women	–	94	–	95	17	83
men	10	90	8	92	21	79
65+	–	93	12	88	20	80
women	–	95	–	90	19	81
men	–	90	–	86	–	80
REGION						
East	7	93	7	93	15	85
Newfoundland	–	93	–	96	18	82
Prince Edward Island	–	94	–	96	–	89
Nova Scotia	–	93	–	92	–	88
New Brunswick	8	92	8	92	17	83
Quebec	18	82	13	87	18	82
Ontario	9	91	6	94	17	83
West	7	93	6	94	17	83
Manitoba	–	93	–	91	16	84
Saskatchewan	–	92	–	95	15	85
Alberta	–	96	–	97	19	81
British Columbia	–	92	–	93	17	83
North	7	93	7	93	17	83
Northwest Territories	–	92	–	92	21	79
Yukon	–	94	–	93	15	85
ENERGY EXPENDITURE						
Active (3 KKD ¹)	13	87	6	94	13	87
Moderately active (1.5–2.9 KKD)	10	90	8	92	18	82
Somewhat active (0.5–1.4 KKD)	9	91	7	93	19	81
Sedentary (<0.5 KKD)	10	90	12	88	25	75

1 Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Awareness of guidelines for physical activity (cont'd)

1999 Physical Activity Monitor

	Physical effort required		Amount of activity required		Reasons people are not active	
	Vigorous	Moderate, if long enough	Only a little bit occasionally	More is better	Too hard to start	They think it's too hard but it isn't
EDUCATION LEVEL						
Less than secondary	15%	85%	13%	87%	20%	80%
Secondary	11	89	7	93	18	82
College	11	89	7	93	18	82
University	7	93	6	94	15	85
HOUSEHOLD INCOME						
< \$20,000	14	86	10	90	21	79
\$20,000–29,999	14	87	12	88	16	84
\$30,000–39,999	12	88	–	93	19	81
\$40,000–59,999	11	89	6	94	19	81
\$60,000–79,999	–	92	–	94	17	83
\$80,000–99,999	–	89	–	96	11	89
\$100,000	–	93	–	96	11	89
EMPLOYMENT STATUS						
Full-time worker	11	89	6	94	17	83
Part-time worker	9	91	–	90	13	87
Unemployed	–	93	–	89	17	83
Homemaker	–	89	–	90	15	85
Student	19	81	–	91	19	81
Retired	8	92	11	89	23	77
COMMUNITY SIZE						
< 1,000	–	93	5	95	19	81
1,000–9,999	10	90	10	90	16	84
10,000–74,999	10	90	6	94	18	82
75,000–299,999	11	89	10	90	17	83
300,000	11	89	6	94	16	84
FAMILY COMPOSITION						
Living with a partner	10	90	7	93	17	83
with children at home	11	89	7	93	15	85
without children at home	8	92	7	93	19	81
Widowed, divorced, separated	9	91	10	90	19	81
with children at home	–	86	–	90	29	71
without children at home	7	93	9	91	16	84
Never married	14	86	8	92	17	83
with children at home	–	85	–	88	–	83
without children at home	14	86	8	92	17	83

– Data unavailable because of insufficient sample size.

Children's and teenagers' physical activity levels

1999 Physical Activity Monitor

	Active enough (≥ 8 KKD) ¹	Not active enough (< 8 KKD) ¹
CHILDREN (5–17)	46%	54%
girls	39	61
boys	52	48
5–12	49	51
girls	43	57
boys	54	46
13–17	42	58
girls	32	68
boys	50	50
REGION		
East	43	57
Central	45	55
West	49	51
North	45	55
PARENT'S ENERGY EXPENDITURE ²		
Active (≥ 3 KKD ³)	52	48
Moderately active (1.5–2.9 KKD)	44	56
Somewhat active (0.5–1.4 KKD)	49	51
Sedentary (< 0.5 KKD)	31	69
PARENT'S EDUCATION LEVEL		
Less than secondary	40	60
Secondary	49	51
College	47	53
University	44	56
HOUSEHOLD INCOME		
$< \$20,000$	33	67
\$20,000–29,999	39	61
\$30,000–39,999	49	51
\$40,000–59,999	52	48
\$60,000–79,999	45	55
\$80,000–99,999	54	46
\$100,000	50	50
COMMUNITY SIZE		
$< 1,000$	54	46
1,000–9,999	50	50
10,000–74,999	43	57
75,000–299,999	44	56
300,000	49	51

1 Kilocalories/kilogram of body weight/day.

2 Parent who answered on behalf of the child.

3 Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

Physical recreation activities, age 1–4

1999 Physical Activity Monitor

Rank, 1999	Activity	Percent of children ¹		
		1999	Girls	Boys
1	Swings, slides, teeter-totters	96%	94%	99%
2	Tobogganing, winter play	76	72	81
3	Running, kicking games	73	60	86*
4	Swimming, Parents & Tots' classes	63	56	70*
5	Bicycling	61	60	63
6	Gymnastics, Kiddy gym, etc.	45	47	43
7	Skating	25	22	28

Physical recreation activities, age 5–17

1999 Physical Activity Monitor

Rank, 1999	Activity	Percent of children ¹		
		1999	Girls	Boys
1	Bicycling	87%	86%	89%
2	Swimming	82	87*	79
3	Swings, slides, teeter-totters	80	84	78
4	Walking	71	76*	66
5	Tobogganing, winter play	68	65	71
6	Skating	65	63	66
7	In-line skating	56	53	59
8	Basketball	50	39	60*
9	Running/jogging	49	45	53*
10	Soccer	47	41	52*
11	Baseball/softball	46	34	56*
12	Social dancing	36	45*	29
13	Alpine skiing	29	27	31
14	Volleyball	28	29	28
15	Badminton	26	22	29*
16	Hockey	25	7	41*
17	Gymnastics	25	28	23
18	Golf	20	10	28*
19	Snowboarding	18	10	24*
20	Skateboarding	18	–	30*
21	Weight training	17	12	21*
22	Tennis	15	13	16
23	Ballet, dance classes	13	22*	–
24	Football	13	–	20*
25	Cross-country skiing	12	12	13
26	Exercise class, aerobics	12	17*	8
27	Racquetball	4	–	–

¹ Percentage who participated at least once in last 12 months.

* Significantly greater than other sex.

– Data unavailable because of insufficient sample size.

Physical recreation activities, ages 5–12 and 13–17

1999 Physical Activity Monitor

Rank, 1999	Activity	Percent of children age 5–12 ¹			Percent of children age 13–17 ¹		
		1999	Girls	Boys	1999	Girls	Boys
1	Bicycling	94%	96%	93%	79%	72%	84%*
2	Swimming	88	92	85	75	79	71
3	Tobogganning, winter play	80	76	83	53	50	56
4	Swings, slides, teeter-totters	80	84	78	–	–	–
5	Walking	74	74	75	66	79*	56
6	Skating	73	76	71	54	45	60*
7	In-line skating	56	51	61*	56	55	56
8	Soccer	54	45	62*	38	35	40
9	Running/jogging	53	48	57	45	42	47
10	Basketball	46	35	55*	57	46	65*
11	Baseball/softball	45	33	55*	47	34	58*
12	Gymnastics	29	33	26	19	–	18
13	Social dancing	28	36*	21	47	57*	39
14	Hockey	23	–	41*	28	–	42*
15	Badminton	22	20	24	30	24	35*
16	Alpine skiing	18	18	18	44	39	48
17	Skateboarding	17	–	28*	19	–	32*
18	Volleyball	15	15	16	46	50	43
19	Ballet, dance classes	15	25*	–	10	17*	–
20	Golf	14	–	21*	27	–	37*
21	Tennis	13	14	13	17	13	19
22	Cross-country skiing	11	11	11	14	13	15
23	Football	10	–	16*	16	–	25*
24	Snowboarding	10	–	14*	28	–	38*
25	Exercise class, aerobics	8	–	–	17	27*	–
26	Weight training	–	–	–	35	24	43*

¹ Percentage who participated at least once in last 12 months.

* Significantly greater than other sex.

– Data unavailable because of insufficient sample size.

Preschoolers' time spent in physical activity (hours/week)

1999 Physical Activity Monitor

	Quiet play		Physical activity indoors		Physical activity outdoors		Total, active play indoors and outdoors ¹
	%	Hours	%	Hours	%	Hours	Hours
TOTAL, CHILDREN (1–4)	88	17.9	92	15.4	90	15.7	28.3
girls	90	18.5	93	14.0	90	16.0	27.4
boys	86	17.2	90	16.8	91	15.3	29.1

Children's and teenagers' time spent in physical activity (hours/week)

1999 Physical Activity Monitor

	Physical activity at home		Physical activity at school		Physical education class		Physical activity elsewhere		Total ¹
	%	Hours	%	Hours	%	Hours	%	Hours	Hours
TOTAL, CHILDREN (5–17)	77	9.8	53	4.2	71	3.2	66	4.9	15.2
girls	77	8.4	45	4.2	72	3.2	63	4.4	13.4
boys	76	11.0	61	4.1	71	3.2	68	5.3	16.7
5–12	82	11.2	52	3.7	73	3.1	66	4.0	16.0
girls	80	10.1	44	3.9	72	3.0	66	4.0	14.7
boys	84	12.2	59	3.5	75	3.1	66	4.0	17.2
13–17	69	7.5	56	4.8	69	3.4	65	6.0	14.1
girls	73	5.8	46	4.5	73	3.3	59	4.9	11.6
boys	67	9.0	63	4.9	66	3.5	70	6.8	16.1
REGION									
East	82	9.6	45	4.6	78	2.9	61	4.6	15.0
Central	75	10.0	57	3.9	72	3.0	64	4.8	15.0
West	78	9.4	49	4.5	68	3.8	70	5.0	15.6
North	71	9.7	49	3.5	76	3.7	79	4.7	15.2

¹ As not all children participate in activities in each of the locations probed, the total column is not equal to the sum of the average time spent by location.

Accessibility of information on physical activity

1999 Physical Activity Monitor

	Ease of getting physical activity information in the community				Amount of physical activity information available in the community		
	Easy	Somewhat easy	Somewhat hard	Hard	None at all	Limited info	Lots of info
TOTAL, ADULTS (18+)	64%	24%	6%	6%	3%	30%	66%
women	63	24	7	6	4	30	65
men	65	24	5	6	3	29	66
18–24	53	35	7	–	–	36	61
women	53	32	–	–	–	34	63
men	52	38	–	–	–	39	58
25–44	62	25	7	6	3	31	65
women	60	26	8	6	3	30	66
men	64	25	6	6	–	32	64
45–64	68	22	5	5	4	25	69
women	69	21	–	5	5	29	65
men	67	22	–	6	–	22	74
65+	75	13	–	8	4	26	65
women	72	16	–	–	–	27	64
men	80	–	–	–	–	24	68
REGION							
East	58	25	7	10	8	36	56
Newfoundland	51	22	–	17	14	36	51
Prince Edward Island	61	28	–	–	–	33	57
Nova Scotia	67	23	–	–	–	32	64
New Brunswick	51	29	9	11	8	42	50
Quebec	56	32	–	–	–	38	56
Ontario	66	22	7	5	–	26	70
West	72	20	4	5	2	25	72
Manitoba	65	19	–	–	–	30	62
Saskatchewan	62	20	–	–	–	33	62
Alberta	75	21	–	–	–	25	74
British Columbia	74	19	–	–	–	21	77
North	73	19	–	–	–	21	76
Northwest Territories	69	22	–	–	–	29	68
Yukon	75	18	–	–	–	17	82
ENERGY EXPENDITURE							
Active (≥ 3 KKD ¹)	67	23	5	5	2	28	69
Moderately active (1.5–2.9)	63	27	7	4	4	30	66
Somewhat active (0.5–1.4)	61	26	7	7	–	34	61
Sedentary (<0.5 KKD)	65	20	–	10	7	27	62

1 Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Accessibility of information on physical activity (cont'd)

1999 Physical Activity Monitor

	Ease of getting physical activity information in the community				Amount of physical activity information available in the community		
	Easy	Somewhat easy	Somewhat hard	Hard	None at all	Limited info	Lots of info
EDUCATION LEVEL							
Less than secondary	60%	24%	6%	10%	6%	35%	57%
Secondary	65	26	5	5	3	30	67
College	64	24	8	5	2	32	65
University	66	23	5	5	3	25	71
HOUSEHOLD INCOME							
< \$20,000	56	20	10	13	8	32	56
\$20,000–29,999	61	28	7	4	4	34	60
\$30,000–39,999	58	30	6	5	–	33	64
\$40,000–59,999	66	25	6	4	–	29	69
\$60,000–79,999	67	26	–	–	–	30	68
\$80,000–99,999	74	18	–	–	–	25	71
\$100,000	68	23	–	–	–	23	75
EMPLOYMENT STATUS							
Full-time worker	66	24	6	5	3	27	69
Part-time worker	62	24	8	6	–	34	62
Unemployed	56	29	–	–	–	37	53
Homemaker	64	29	–	–	–	33	63
Student	44	41	–	–	–	42	53
Retired	69	17	–	8	4	28	65
COMMUNITY SIZE							
< 1,000	43	22	13	22	17	45	36
1,000–9,999	57	28	9	6	3	40	55
10,000–74,999	68	26	3	–	–	24	75
75,000–299,999	72	21	–	–	–	19	78
300,000	72	20	6	–	–	25	73
FAMILY COMPOSITION							
Living with a partner	66	24	5	5	3	28	67
with children at home	66	23	6	5	3	29	67
without children at home	66	24	5	5	3	28	67
Widowed, divorced, separated	72	16	5	7	4	24	69
with children at home	71	15	–	–	–	22	73
without children at home	72	16	–	8	–	25	67
Never married	57	29	8	6	3	35	61
with children at home	47	32	–	–	–	43	53
without children at home	58	29	8	5	–	34	62

– Data unavailable because of insufficient sample size.

Exposure to physical activity information

1999 Physical Activity Monitor

	Obtained information during past 3 months	Who obtained the information?		
		They sought it out themselves	Someone else offered	Both
TOTAL, ADULTS (18+)	41%	14%	49%	37%
women	44	14	47	39
men	38	14	51	35
18–24	46	22	40	38
women	46	–	39	37
men	46	–	41	38
25–44	42	14	43	42
women	47	14	42	44
men	37	15	46	39
45–64	44	8	61	31
women	47	10	55	35
men	40	–	68	27
65+	24	–	57	24
women	25	–	63	–
men	22	–	–	–
REGION				
East	34	16	43	41
Newfoundland	25	–	–	–
Prince Edward Island	32	–	37	43
Nova Scotia	41	–	48	37
New Brunswick	32	–	40	47
Quebec	39	–	51	34
Ontario	39	15	50	35
West	47	13	47	40
Manitoba	43	–	48	39
Saskatchewan	44	–	44	43
Alberta	46	–	51	38
British Columbia	50	–	45	41
North	54	–	49	47
Northwest Territories	47	–	42	56
Yukon	58	–	53	43
ENERGY EXPENDITURE				
Active (≥ 3 KKD ¹)	48	16	40	45
Moderately active (1.5–2.9 KKD)	40	15	51	34
Somewhat active (0.5–1.4 KKD)	37	14	54	32
Sedentary (<0.5 KKD)	28	–	78	18

1 Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Exposure to physical activity information (cont'd)

1999 Physical Activity Monitor

	Obtained information during past 3 months	Who obtained the information?		
		They sought it out themselves	Someone else offered	Both
EDUCATION LEVEL				
Less than secondary	26%	19%	54%	27%
Secondary	37	10	56	34
College	45	16	48	36
University	50	15	43	42
HOUSEHOLD INCOME				
< \$20,000	30	23	53	24
\$20,000–29,999	32	–	53	31
\$30,000–39,999	37	16	59	24
\$40,000–59,999	47	13	42	45
\$60,000–79,999	44	–	53	39
\$80,000–99,999	47	–	49	40
\$100,000	54	–	44	44
EMPLOYMENT STATUS				
Full-time worker	42	13	49	37
Part-time worker	45	16	44	40
Unemployed	36	–	–	–
Homemaker	45	–	38	50
Student	39	–	43	47
Retired	31	–	63	26
COMMUNITY SIZE				
< 1,000	27	–	50	28
1,000–9,999	38	15	52	33
10,000–74,999	42	15	45	40
75,000–299,999	50	12	52	36
300,000	44	13	48	39
FAMILY COMPOSITION				
Living with a partner	42	12	52	37
with children at home	47	9	49	41
without children at home	38	14	54	32
Widowed, divorced, separated	37	18	50	32
with children at home	45	–	49	39
without children at home	35	20	51	29
Never married	41	19	41	40
with children at home	47	–	–	–
without children at home	40	18	42	41

– Data unavailable because of insufficient sample size.

How Canadians get information on physical activity

1999 Physical Activity Monitor

	Obtained information on physical activity through...		
	Newspaper, TV, or radio	Organized course, lecture, class, or workshop	Computer or Internet
TOTAL, ADULTS (18+)	57%	18%	10%
women	57	21	8
men	57	15	11
18–24	42	18	15
women	40	–	–
men	43	–	–
25–44	58	18	8
women	58	22	8
men	58	13	9
45–64	59	20	10
women	56	22	–
men	62	–	–
65+	76	–	–
women	81	–	–
men	–	–	–
REGION			
East	59	16	9
Newfoundland	69	–	–
Prince Edward Island	63	–	–
Nova Scotia	60	–	–
New Brunswick	53	–	–
Quebec	67	–	–
Ontario	49	20	9
West	57	22	13
Manitoba	55	27	–
Saskatchewan	64	–	–
Alberta	57	–	–
British Columbia	56	23	–
North	68	20	15
Northwest Territories	69	25	–
Yukon	67	–	–
ENERGY EXPENDITURE			
Active (3 KKD ¹)	54	22	12
Moderately active (1.5–2.9 KKD)	54	16	10
Somewhat active (0.5–1.4 KKD)	63	16	–
Sedentary (<0.5 KKD)	65	–	–

1 Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

How Canadians get information on physical activity (cont'd)

1999 Physical Activity Monitor

	Obtained information on physical activity through...		
	Newspaper, TV, or radio	Organized course, lecture, class, or workshop	Computer or Internet
EDUCATION LEVEL			
Less than secondary	61%	20%	–
Secondary	62	19	–
College	56	16	8
University	53	19	15
HOUSEHOLD INCOME			
< \$20,000	55	14	–
\$20,000–29,999	51	24	–
\$30,000–39,999	56	20	–
\$40,000–59,999	68	16	9
\$60,000–79,999	60	15	–
\$80,000–99,999	54	–	–
\$100,000	48	17	–
EMPLOYMENT STATUS			
Full-time worker	56	18	12
Part-time worker	57	23	–
Unemployed	60	–	–
Homemaker	59	–	–
Student	39	–	–
Retired	73	–	–
COMMUNITY SIZE			
< 1,000	56	–	–
1,000–9,999	62	21	–
10,000–74,999	64	14	10
75,000–299,999	60	22	–
300,000	46	16	–
FAMILY COMPOSITION			
Living with a partner	61	17	8
with children at home	59	16	7
without children at home	62	18	9
Widowed, divorced, separated	64	24	–
with children at home	49	–	–
without children at home	69	20	–
Never married	45	20	13
with children at home	48	–	–
without children at home	44	18	12

– Data unavailable because of insufficient sample size.

Where Canadians get information on physical activity

1999 Physical Activity Monitor

	Obtained information on physical activity through...			
	Sport and recreation facility	Community centre, school, or other facility not designed for physical activity	Shopping mall, on the street, or any other public place	Doctor's office, medical clinic, or other health care facility
TOTAL, ADULTS (18+)	51%	43%	25%	13%
women	51	46	24	12
men	51	39	26	15
18–24	63	52	25	14
women	60	47	–	–
men	65	57	33	–
25–44	54	46	25	10
women	54	51	25	11
men	55	39	26	9
45–64	43	35	24	16
women	44	39	26	13
men	41	30	22	20
65+	32	34	28	–
women	–	–	–	–
men	–	–	–	–
REGION				
East	55	43	24	15
Newfoundland	53	–	–	–
Prince Edward Island	57	42	–	–
Nova Scotia	56	46	–	–
New Brunswick	53	43	29	–
Quebec	47	45	34	–
Ontario	52	42	16	11
West	51	42	27	12
Manitoba	43	43	24	–
Saskatchewan	47	42	–	–
Alberta	52	39	28	–
British Columbia	54	44	–	–
North	55	39	27	11
Northwest Territories	54	40	37	–
Yukon	56	39	21	–
ENERGY EXPENDITURE				
Active (3 KKD ¹)	59	47	23	13
Moderately active (1.5–2.9 KKD)	54	40	26	10
Somewhat active (0.5–1.4 KKD)	40	43	28	18
Sedentary (<0.5 KKD)	26	32	22	–

¹ Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Where Canadians get information on physical activity (cont'd)

1999 Physical Activity Monitor

	Obtained information on physical activity through...			
	Sport and recreation facility	Community centre, school, or other facility not designed for physical activity	Shopping mall, on the street, or any other public place	Doctor's office, medical clinic, or other health care facility
EDUCATION LEVEL				
Less than secondary	38%	41%	28%	16%
Secondary	47	43	31	16
College	51	46	28	13
University	58	42	17	11
HOUSEHOLD INCOME				
< \$20,000	42	47	28	17
\$20,000–29,999	36	52	34	19
\$30,000–39,999	40	37	26	–
\$40,000–59,999	56	48	26	16
\$60,000–79,999	54	43	22	–
\$80,000–99,999	63	39	28	–
\$100,000	59	33	16	–
EMPLOYMENT STATUS				
Full-time worker	51	42	24	9
Part-time worker	67	52	29	–
Unemployed	–	–	–	–
Homemaker	48	48	–	–
Student	60	59	–	–
Retired	34	34	26	31
COMMUNITY SIZE				
< 1,000	35	43	35	–
1,000–9,999	48	48	32	12
10,000–74,999	51	40	25	13
75,000–299,999	54	40	20	15
300,000	54	41	18	11
FAMILY COMPOSITION				
Living with a partner	48	43	26	14
with children at home	54	51	22	8
without children at home	42	37	31	20
Widowed, divorced, separated	42	37	23	18
with children at home	42	43	–	–
without children at home	43	34	24	18
Never married	62	45	21	9
with children at home	74	60	–	–
without children at home	59	42	22	6

– Data unavailable because of insufficient sample size.

Obtaining information through social networks

1999 Physical Activity Monitor

	Obtained information on physical activity through...		
	Friends or family	Church representative, public figure, or other prominent person	Someone not mentioned
TOTAL, ADULTS (18+)	55%	7%	30%
women	56	7	29
men	53	7	32
18–24	65	–	20
women	60	–	–
men	70	–	–
25–44	56	7	32
women	59	7	32
men	53	–	31
45–64	50	7	32
women	54	8	29
men	45	–	37
65+	37	–	35
women	33	–	–
men	–	–	–
REGION			
East	59	11	30
Newfoundland	71	–	–
Prince Edward Island	70	–	–
Nova Scotia	51	–	39
New Brunswick	63	–	23
Quebec	57	–	26
Ontario	52	–	36
West	54	8	26
Manitoba	45	–	40
Saskatchewan	59	–	27
Alberta	48	–	29
British Columbia	60	–	–
North	59	9	34
Northwest Territories	55	–	36
Yukon	61	–	33
ENERGY EXPENDITURE			
Active (3 KKD ¹)	60	8	26
Moderately active (1.5–2.9 KKD)	48	5	32
Somewhat active (0.5–1.4 KKD)	54	–	32
Sedentary (<0.5 KKD)	46	–	37

1 Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Obtaining information through social networks (cont'd)

1999 Physical Activity Monitor

	Obtained information on physical activity through...		
	Friends or family	Church representative, public figure, or other prominent person	Someone not mentioned
EDUCATION LEVEL			
Less than secondary	49%	10%	28%
Secondary	51	8	28
College	58	6	24
University	55	5	36
HOUSEHOLD INCOME			
< \$20,000	46	–	29
\$20,000–29,999	59	–	29
\$30,000–39,999	53	–	22
\$40,000–59,999	58	–	26
\$60,000–79,999	54	–	26
\$80,000–99,999	53	–	40
\$100,000	51	–	43
EMPLOYMENT STATUS			
Full-time worker	54	6	31
Part-time worker	65	–	25
Unemployed	55	–	–
Homemaker	56	–	–
Student	55	–	–
Retired	43	–	36
COMMUNITY SIZE			
< 1,000	67	17	–
1,000–9,999	58	8	24
10,000–74,999	53	5	30
75,000–299,999	52	–	32
300,000	54	–	34
FAMILY COMPOSITION			
Living with a partner	52	7	31
with children at home	53	7	32
without children at home	52	7	30
Widowed, divorced, separated	52	9	34
with children at home	58	–	30
without children at home	49	–	36
Never married	61	5	25
with children at home	57	–	–
without children at home	62	5	25

– Data unavailable because of insufficient sample size.

Type of information received

1999 Physical Activity Monitor

	Type of information received					
	Why someone should become active	How to become more active in daily life	How to improve physical activity skills	Where to go to be active	Kinds of facilities, programs, services available	Any other kind of info
TOTAL, ADULTS (18+)	60%	70%	68%	88%	86%	10%
women	60	73	67	87	86	11
men	60	65	69	90	85	9
18–24	55	73	77	86	75	–
women	50	75	69	80	73	–
men	59	71	86	93	77	–
25–44	55	65	65	89	88	9
women	56	72	68	90	90	9
men	54	56	60	88	84	–
45–64	66	74	69	87	87	14
women	67	73	65	85	85	13
men	65	75	73	90	90	–
65+	79	77	66	91	90	–
women	78	80	63	88	89	–
men	–	73	–	95	92	–
REGION						
East	59	74	67	89	87	8
Newfoundland	55	72	71	89	85	–
Prince Edward Island	59	75	74	81	85	–
Nova Scotia	59	74	62	92	91	–
New Brunswick	63	76	74	85	83	–
Quebec	64	64	69	90	82	–
Ontario	58	73	65	87	86	12
West	60	70	72	88	88	10
Manitoba	59	76	73	87	87	–
Saskatchewan	58	74	67	85	86	–
Alberta	60	70	70	90	88	–
British Columbia	61	67	75	88	87	–
North	64	74	71	90	90	–
Northwest Territories	57	71	73	91	93	–
Yukon	68	76	70	89	89	–
ENERGY EXPENDITURE						
Active (3 KKD ¹)	59	69	70	88	84	9
Moderately active (1.5–2.9)	62	68	67	89	89	12
Somewhat active (0.5–1.4)	61	72	68	90	85	–
Sedentary (<0.5 KKD)	62	76	69	85	82	–

¹ Kilojoules/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Type of information received (cont'd)

1999 Physical Activity Monitor

	Type of information received					
	Why someone should become active	How to become more active in daily life	How to improve physical activity skills	Where to go to be active	Kinds of facilities, programs, services available	Any other kind of info
EDUCATION LEVEL						
Less than secondary	61%	64%	66%	87%	83%	–
Secondary	64	69	68	88	87	–
College	61	73	73	89	85	9
University	57	70	66	89	86	13
HOUSEHOLD INCOME						
< \$20,000	60	75	70	79	70	–
\$20,000–29,999	53	67	72	91	89	–
\$30,000–39,999	68	70	67	86	77	–
\$40,000–59,999	61	67	68	89	89	10
\$60,000–79,999	64	72	66	92	93	–
\$80,000–99,999	61	67	67	93	92	–
\$100,000	57	70	70	85	83	–
EMPLOYMENT STATUS						
Full-time worker	56	67	64	90	86	11
Part-time worker	59	67	69	85	88	–
Unemployed	79	73	81	91	80	–
Homemaker	61	69	73	86	90	–
Student	61	79	81	88	75	–
Retired	74	77	72	86	85	–
COMMUNITY SIZE						
< 1,000	53	62	57	76	78	–
1,000–9,999	61	71	74	90	83	–
10,000–74,999	61	70	69	88	89	8
75,000–299,999	65	74	70	89	89	10
300,000	55	68	67	90	85	15
FAMILY COMPOSITION						
Living with a partner	61	71	67	89	88	10
with children at home	54	68	64	91	90	8
without children at home	67	73	69	87	87	12
Widowed, divorced, separated	69	68	69	90	88	–
with children at home	59	63	67	90	91	–
without children at home	73	70	70	90	86	–
Never married	55	68	73	86	78	8
with children at home	57	71	84	85	78	–
without children at home	55	67	71	86	78	–

– Data unavailable because of insufficient sample size.

Does the information help you to become more active?

1999 Physical Activity Monitor

	Respondents' perception of how active they are			Info received made them...		
	Not at all	Occasionally	Regularly	Think about being more active	Become more active	Had no influence
TOTAL, ADULTS (18+)	3%	32%	65%	55%	65%	35%
women	5	32	62	62	65	34
men	–	30	68	45	64	36
18–24	–	26	74	56	77	23
women	–	30	69	62	76	–
men	–	–	79	50	78	–
25–44	–	33	64	56	64	36
women	–	35	59	66	67	32
men	–	30	69	44	58	42
45–64	–	35	61	57	57	42
women	–	31	63	63	53	46
men	–	39	58	50	63	37
65+	–	–	75	27	85	–
women	–	–	67	33	–	–
men	–	–	88	–	–	–
REGION						
East	–	33	65	59	65	34
Newfoundland	–	–	67	68	–	–
Prince Edward Island	–	–	64	60	68	–
Nova Scotia	–	38	60	59	63	–
New Brunswick	–	24	73	56	64	35
Quebec	–	37	58	57	62	38
Ontario	–	30	66	53	64	36
West	–	29	69	54	66	34
Manitoba	–	25	74	53	62	–
Saskatchewan	–	31	66	58	70	–
Alberta	–	27	71	52	53	–
British Columbia	–	30	67	54	74	–
North	–	28	70	53	72	28
Northwest Territories	–	36	63	56	65	36
Yukon	–	24	74	52	76	–
ENERGY EXPENDITURE						
Active (3 KKD ¹)	–	12	88	48	76	24
Moderately active (1.5–2.9 KKD)	–	37	61	56	69	31
Somewhat active (0.5–1.4 KKD)	–	53	41	61	53	46
Sedentary (<0.5 KKD)	–	64	21	71	34	66

¹ Kilojoules/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Does the information help you to become more active? (cont'd)

1999 Physical Activity Monitor

	Respondents' perception of how active they are			Info received made them...		
	Not at all	Occasionally	Regularly	Think about being more active	Become more active	Had no influence
EDUCATION LEVEL						
Less than secondary	–	28%	59%	50%	59%	41%
Secondary	–	34	63	60	66	34
College	–	33	64	59	62	38
University	–	30	68	49	66	34
HOUSEHOLD INCOME						
< \$20,000	–	38	52	63	62	36
\$20,000–29,999	–	34	65	50	71	–
\$30,000–39,999	–	32	66	61	64	36
\$40,000–59,999	–	29	67	55	63	37
\$60,000–79,999	–	32	64	51	53	47
\$80,000–99,999	–	27	73	62	70	–
\$100,000	–	27	72	49	81	–
EMPLOYMENT STATUS						
Full-time worker	–	35	63	52	60	40
Part-time worker	–	20	75	61	66	33
Unemployed	–	–	55	67	–	–
Homemaker	–	–	59	66	68	–
Student	–	34	64	62	74	–
Retired	–	22	74	46	76	–
COMMUNITY SIZE						
< 1,000	–	33	65	44	57	–
1,000–9,999	–	32	68	56	62	38
10,000–74,999	–	37	61	56	71	29
75,000–299,999	–	27	69	57	62	38
300,000	–	31	66	56	64	36
FAMILY COMPOSITION						
Living with a partner	–	32	65	53	67	33
with children at home	–	36	62	55	65	35
without children at home	–	29	67	52	68	31
Widowed, divorced, separated	–	27	67	53	53	47
with children at home	–	–	59	65	–	–
without children at home	–	23	69	48	51	49
Never married	–	30	66	59	63	37
with children at home	–	–	72	60	–	–
without children at home	–	31	65	59	63	37

– Data unavailable because of insufficient sample size.

Community infrastructure: walking trails

1999 Physical Activity Monitor

	Amount of places to safely walk			How often these places are used		
	Many	Some	None	Frequently	Sometimes	Not at all
TOTAL, ADULTS (18+)	67%	28%	6%	47%	42%	11%
women	63	30	6	52	39	9
men	70	25	5	41	45	13
18–24	69	27	–	41	47	11
women	59	37	–	47	48	–
men	79	18	–	36	47	18
25–44	68	27	5	48	42	10
women	66	27	7	54	37	9
men	70	26	4	42	48	11
45–64	65	29	6	47	43	10
women	62	32	6	53	40	7
men	68	26	6	41	45	14
65+	64	28	8	51	32	18
women	60	31	–	50	31	19
men	68	25	–	51	32	17
REGION						
East	56	34	10	43	46	12
Newfoundland	52	37	–	47	43	–
Prince Edward Island	67	23	–	46	41	–
Nova Scotia	52	38	–	38	51	–
New Brunswick	61	29	10	45	41	14
Quebec	61	32	–	51	40	–
Ontario	68	27	5	44	45	11
West	74	23	3	48	39	13
Manitoba	63	29	–	52	37	11
Saskatchewan	69	23	–	44	42	14
Alberta	77	20	–	48	38	14
British Columbia	76	23	–	48	40	–
North	83	13	4	59	33	8
Northwest Territories	72	20	8	50	40	–
Yukon	90	–	–	64	28	–
ENERGY EXPENDITURE						
Active (3 KKD ¹)	70	24	5	56	34	9
Moderately active (1.5–2.9 KKD)	69	27	4	48	44	8
Somewhat active (0.5–1.4 KKD)	64	30	6	41	48	11
Sedentary (<0.5 KKD)	56	34	9	24	50	26

1 Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Community infrastructure: walking trails (cont'd)

1999 Physical Activity Monitor

	Amount of places to safely walk			How often these places are used		
	Many	Some	None	Frequently	Sometimes	Not at all
EDUCATION LEVEL						
Less than secondary	59%	32%	9%	44%	41%	14%
Secondary	66	29	5	44	43	13
College	66	29	5	46	42	12
University	74	22	4	51	42	7
HOUSEHOLD INCOME						
< \$20,000	59	33	8	46	40	14
\$20,000–29,999	60	31	8	47	45	8
\$30,000–39,999	65	30	5	47	40	12
\$40,000–59,999	69	26	4	45	45	10
\$60,000–79,999	70	24	–	45	45	10
\$80,000–99,999	68	27	–	54	39	–
\$100,000	82	15	–	55	37	–
EMPLOYMENT STATUS						
Full-time worker	69	26	5	45	44	11
Part-time worker	71	23	6	54	39	7
Unemployed	68	27	–	45	44	–
Homemaker	53	38	–	48	39	13
Student	64	31	–	41	50	–
Retired	63	30	7	52	32	15
COMMUNITY SIZE						
< 1,000	42	39	19	42	43	15
1,000–9,999	60	32	8	46	40	15
10,000–74,999	74	25	–	50	41	9
75,000–299,999	78	20	–	45	45	10
300,000	73	23	–	50	42	9
FAMILY COMPOSITION						
Living with a partner	67	27	6	48	42	10
with children at home	65	29	6	46	44	9
without children at home	69	26	5	49	40	11
Widowed, divorced, separated	68	25	6	49	37	14
with children at home	76	18	–	48	42	–
without children at home	66	27	6	50	35	15
Never married	65	30	6	43	45	12
with children at home	60	36	–	40	44	–
without children at home	66	29	6	43	45	12

– Data unavailable because of insufficient sample size.

Community infrastructure: walking trails (cont'd)

1999 Physical Activity Monitor

	Importance of having safe places to walk			If there were more such places, would walk...		
	Very important	Somewhat important	Not important	More often	As often	Less often
TOTAL, ADULTS (18+)	82%	15%	3%	28%	70%	2%
women	88	11	2	34	64	2
men	76	19	5	21	77	2
18–24	77	19	–	31	65	–
women	84	15	–	43	54	–
men	70	23	–	19	76	–
25–44	84	14	2	29	69	–
women	89	10	–	36	63	–
men	79	17	4	23	75	–
45–64	80	16	4	24	74	–
women	87	11	–	29	70	–
men	74	21	–	20	78	–
65+	84	10	–	23	75	–
women	88	8	–	27	70	–
men	79	–	–	–	80	–
REGION						
East	83	14	3	26	72	–
Newfoundland	86	–	–	26	73	–
Prince Edward Island	83	–	–	21	79	–
Nova Scotia	80	15	–	28	70	–
New Brunswick	84	14	–	25	74	–
Quebec	77	19	–	30	67	–
Ontario	84	13	–	27	72	–
West	82	12	5	27	72	–
Manitoba	81	14	–	28	70	–
Saskatchewan	81	13	–	24	74	–
Alberta	84	–	–	24	74	–
British Columbia	83	–	–	30	69	–
North	80	15	–	17	81	–
Northwest Territories	70	23	–	24	73	–
Yukon	87	–	–	–	86	–
ENERGY EXPENDITURE						
Active (≥ 3 KKD ¹)	83	13	3	27	71	–
Moderately active (1.5–2.9 KKD)	82	15	–	26	72	–
Somewhat active (0.5–1.4 KKD)	83	14	–	29	69	–
Sedentary (<0.5 KKD)	75	16	–	28	67	–

1 Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Community infrastructure: walking trails (cont'd)

1999 Physical Activity Monitor

	Importance of having safe places to walk			If there were more such places, would walk...		
	Very important	Somewhat important	Not important	More often	As often	Less often
EDUCATION LEVEL						
Less than secondary	78%	18%	4%	28%	68%	–
Secondary	80	17	4	28	71	–
College	81	15	3	26	72	–
University	87	11	2	28	71	–
HOUSEHOLD INCOME						
< \$20,000	78	19	–	39	58	–
\$20,000–29,999	82	14	–	32	67	–
\$30,000–39,999	78	18	–	30	67	–
\$40,000–59,999	83	14	4	25	74	–
\$60,000–79,999	80	17	–	21	78	–
\$80,000–99,999	85	12	–	28	71	–
\$100,000	86	10	–	23	77	–
EMPLOYMENT STATUS						
Full-time worker	82	15	3	25	73	–
Part-time worker	84	15	–	32	67	–
Unemployed	74	20	–	34	63	–
Homemaker	80	–	–	35	63	–
Student	83	16	–	36	60	–
Retired	84	11	–	25	74	–
COMMUNITY SIZE						
< 1,000	71	21	9	25	71	–
1,000–9,999	80	15	5	28	71	–
10,000–74,999	83	14	–	20	79	–
75,000–299,999	84	14	–	29	70	–
300,000	85	12	–	30	68	–
FAMILY COMPOSITION						
Living with a partner	83	14	3	26	72	–
with children at home	85	12	–	28	70	–
without children at home	81	15	4	25	74	–
Widowed, divorced, separated	86	12	–	24	74	–
with children at home	89	–	–	39	60	–
without children at home	85	13	–	20	78	–
Never married	79	17	4	32	65	–
with children at home	81	–	–	32	67	–
without children at home	79	17	4	32	65	–

– Data unavailable because of insufficient sample size.

Community infrastructure: bicycling paths, trails, and lanes

1999 Physical Activity Monitor

	Amount of places to safely bike			How often these places are used		
	Many	Some	None	Frequently	Sometimes	Not at all
TOTAL, ADULTS (18+)	31%	47%	22%	22%	42%	35%
women	26	48	26	21	41	39
men	36	46	19	23	44	33
18–24	26	53	21	21	52	27
women	16	56	28	–	59	27
men	36	50	14	27	46	27
25–44	31	47	22	22	43	35
women	27	48	25	21	42	37
men	35	46	19	22	44	34
45–64	30	47	23	24	39	38
women	27	48	25	25	31	44
men	32	47	21	22	45	32
65+	43	33	24	–	–	53
women	40	35	26	–	–	69
men	47	31	22	–	–	–
REGION						
East	12	45	43	13	37	50
Newfoundland	14	40	46	–	–	48
Prince Edward Island	19	56	25	–	38	50
Nova Scotia	–	41	52	–	–	61
New Brunswick	15	51	34	16	42	42
Quebec	38	48	15	30	43	27
Ontario	25	49	26	20	45	35
West	38	44	18	20	40	40
Manitoba	20	52	28	18	50	32
Saskatchewan	28	41	31	–	40	39
Alberta	48	36	17	27	36	38
British Columbia	40	47	13	–	40	44
North	40	43	17	32	44	24
Northwest Territories	24	51	25	28	43	30
Yukon	51	38	–	34	45	21
ENERGY EXPENDITURE						
Active (3 KKD ¹)	33	47	19	33	44	23
Moderately active (1.5–2.9 KKD)	31	48	21	19	41	39
Somewhat active (0.5–1.4 KKD)	30	46	24	11	46	42
Sedentary (<0.5 KKD)	24	46	30	–	30	66

1 Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Community infrastructure: bicycling paths, trails, and lanes (cont'd)

1999 Physical Activity Monitor

	Amount of places to safely bike			How often these places are used		
	Many	Some	None	Frequently	Sometimes	Not at all
EDUCATION LEVEL						
Less than secondary	27%	46%	27%	24%	41%	35%
Secondary	29	47	24	20	41	40
College	33	47	20	24	42	34
University	34	47	18	22	45	33
HOUSEHOLD INCOME						
< \$20,000	26	50	24	22	38	40
\$20,000–29,999	32	42	26	25	41	34
\$30,000–39,999	31	46	23	19	39	43
\$40,000–59,999	35	47	18	22	43	34
\$60,000–79,999	31	50	19	22	39	39
\$80,000–99,999	37	46	17	28	49	23
\$100,000	36	45	19	28	44	28
EMPLOYMENT STATUS						
Full-time worker	32	48	19	22	43	35
Part-time worker	28	47	25	20	47	34
Unemployed	35	40	25	32	23	45
Homemaker	30	44	27	–	–	42
Student	22	61	17	17	59	23
Retired	34	37	28	27	28	45
COMMUNITY SIZE						
< 1,000	13	32	55	–	35	47
1,000–9,999	25	42	33	21	48	31
10,000–74,999	34	53	13	26	41	33
75,000–299,999	35	53	11	20	43	37
300,000	40	44	16	23	43	34
FAMILY COMPOSITION						
Living with a partner	32	46	22	23	41	36
with children at home	28	49	23	20	46	34
without children at home	36	44	20	26	37	37
Widowed, divorced, separated	35	43	23	23	35	42
with children at home	35	41	24	–	43	–
without children at home	35	43	23	22	31	47
Never married	27	50	23	20	47	33
with children at home	15	61	24	–	50	–
without children at home	29	48	23	20	47	34

– Data unavailable because of insufficient sample size.

Community infrastructure: bicycling paths, trails, and lanes (cont'd)

1999 Physical Activity Monitor

	Importance of having safe places to bike			If there were more such places, would bike...		
	Very important	Somewhat important	Not important	More often	As often	Less often
TOTAL, ADULTS (18+)	67%	26%	6%	40%	57%	3%
women	73	23	4	43	53	4
men	62	30	9	37	61	3
18–24	52	40	–	38	59	–
women	57	39	–	41	56	–
men	48	41	–	35	63	–
25–44	71	24	6	42	55	3
women	79	18	–	45	51	–
men	63	28	8	38	58	–
45–64	69	25	6	39	58	–
women	74	20	5	42	54	–
men	64	30	6	36	62	–
65+	71	21	–	31	65	–
women	72	–	–	–	50	–
men	71	–	–	–	74	–
REGION						
East	63	30	7	43	52	5
Newfoundland	68	26	–	46	51	–
Prince Edward Island	65	29	–	34	63	–
Nova Scotia	56	35	–	42	49	–
New Brunswick	67	29	–	43	55	–
Quebec	76	21	–	38	58	–
Ontario	63	30	7	45	51	–
West	65	26	9	32	66	–
Manitoba	66	26	–	39	59	–
Saskatchewan	64	28	–	26	70	–
Alberta	70	20	–	27	72	–
British Columbia	62	30	–	36	64	–
North	71	23	7	33	65	–
Northwest Territories	64	29	–	36	62	–
Yukon	75	18	–	32	66	–
ENERGY EXPENDITURE						
Active (≥ 3 KKD ¹)	70	24	7	41	56	3
Moderately active (1.5–2.9 KKD)	70	25	5	39	59	–
Somewhat active (0.5–1.4 KKD)	61	32	7	40	56	–
Sedentary (<0.5 KKD)	60	33	7	30	62	–

¹ Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Community infrastructure: bicycling paths, trails, and lanes (cont'd)

1999 Physical Activity Monitor

	Importance of having safe places to bike			If there were more such places, would bike...		
	Very important	Somewhat important	Not important	More often	As often	Less often
EDUCATION LEVEL						
Less than secondary	64%	29%	7%	42%	54%	—
Secondary	66	26	8	36	61	3
College	67	28	6	39	59	—
University	69	25	6	42	55	—
HOUSEHOLD INCOME						
< \$20,000	67	29	—	46	47	—
\$20,000–29,999	67	26	8	40	59	—
\$30,000–39,999	73	23	—	39	59	—
\$40,000–59,999	69	25	6	39	58	—
\$60,000–79,999	64	30	—	40	57	—
\$80,000–99,999	75	23	—	32	68	—
\$100,000	61	26	—	41	56	—
EMPLOYMENT STATUS						
Full-time worker	69	25	7	37	60	3
Part-time worker	75	21	—	49	48	—
Unemployed	51	43	—	42	56	—
Homemaker	65	28	—	51	44	—
Student	54	41	—	40	58	—
Retired	68	24	8	37	59	—
COMMUNITY SIZE						
< 1,000	55	34	11	48	50	—
1,000–9,999	63	29	7	41	57	—
10,000–74,999	71	24	5	37	58	—
75,000–299,999	67	28	—	38	58	—
300,000	71	23	6	37	61	—
FAMILY COMPOSITION						
Living with a partner	69	25	6	40	57	3
with children at home	73	23	4	40	56	—
without children at home	67	26	7	39	59	—
Widowed, divorced, separated	75	17	8	42	53	—
with children at home	78	—	—	52	45	—
without children at home	74	16	10	37	57	—
Never married	59	33	7	39	58	—
with children at home	58	29	—	28	72	—
without children at home	59	34	7	41	56	—

— Data unavailable because of insufficient sample size.

Willingness to bicycle on various types of routes

1999 Physical Activity Monitor

	% very willing to ride bicycle on			
	Roads without vehicle traffic, separate bike lane	Multi-use trails without vehicle traffic	Roads with vehicle traffic, designated bike lane	Roads with vehicle traffic, no designated bike lane
TOTAL, ADULTS (18+)	88%	57%	51%	11%
women	91	57	47	7
men	86	57	55	15
18–24	89	72	55	11
women	91	75	50	–
men	88	69	60	15
25–44	90	60	53	12
women	93	56	49	6
men	87	63	56	17
45–64	85	44	48	9
women	87	46	42	7
men	83	42	53	10
65+	83	39	37	–
women	87	–	–	–
men	81	–	–	–
REGION				
East	88	54	44	12
Newfoundland	85	52	41	–
Prince Edward Island	84	59	43	–
Nova Scotia	91	54	39	–
New Brunswick	87	56	53	8
Quebec	89	51	56	–
Ontario	88	60	52	13
West	88	60	48	13
Manitoba	86	55	53	15
Saskatchewan	86	63	48	19
Alberta	88	61	45	–
British Columbia	89	60	48	–
North	87	62	63	21
Northwest Territories	84	56	61	22
Yukon	89	66	63	20
ENERGY EXPENDITURE				
Active (≥ 3 KKD ¹)	90	62	60	14
Moderately active (1.5–2.9 KKD)	87	56	45	10
Somewhat active (0.5–1.4 KKD)	89	53	48	10
Sedentary (<0.5 KKD)	81	51	37	–

1 Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Willingness to bicycle on various types of routes (cont'd)

1999 Physical Activity Monitor

	% very willing to ride bicycle on			
	Roads without vehicle traffic, separate bike lane	Multi-use trails without vehicle traffic	Roads with vehicle traffic, designated bike lane	Roads with vehicle traffic, no designated bike lane
EDUCATION LEVEL				
Less than secondary	83%	54%	50%	12%
Secondary	88	58	50	11
College	90	58	49	9
University	90	59	54	13
HOUSEHOLD INCOME				
< \$20,000	86	58	53	13
\$20,000–29,999	85	58	53	13
\$30,000–39,999	89	53	53	12
\$40,000–59,999	89	47	51	8
\$60,000–79,999	90	62	47	14
\$80,000–99,999	93	65	58	–
\$100,000	87	63	51	12
EMPLOYMENT STATUS				
Full-time worker	88	57	52	12
Part-time worker	92	61	45	9
Unemployed	91	58	64	–
Homemaker	87	49	42	–
Student	94	72	56	–
Retired	79	38	45	–
COMMUNITY SIZE				
< 1,000	89	54	54	22
1,000–9,999	89	55	50	11
10,000–74,999	91	58	52	11
75,000–299,999	88	65	55	8
300,000	86	57	50	13
FAMILY COMPOSITION				
Living with a partner	89	53	49	10
with children at home	89	56	48	9
without children at home	88	51	50	11
Widowed, divorced, separated	88	52	50	12
with children at home	87	61	48	–
without children at home	88	47	52	11
Never married	87	67	56	14
with children at home	88	52	57	–
without children at home	87	69	55	14

– Data unavailable because of insufficient sample size.

Community infrastructure: recreation trails

1999 Physical Activity Monitor

	Amount of multi-purpose recreation trails			How often these places are used		
	Many	Some	None	Frequently	Sometimes	Not at all
TOTAL, ADULTS (18+)	28%	55%	17%	18%	55%	27%
women	25	55	20	18	54	28
men	31	55	14	18	57	25
18–24	27	58	15	19	66	15
women	23	56	21	17	70	–
men	31	61	–	21	63	16
25–44	28	54	18	19	58	23
women	24	56	20	20	55	25
men	32	52	16	18	60	22
45–64	27	58	15	17	52	31
women	27	56	17	20	48	31
men	28	60	12	15	55	31
65+	32	49	20	12	40	48
women	28	48	24	–	38	55
men	36	49	14	–	42	40
REGION						
East	16	58	26	18	51	31
Newfoundland	19	49	32	21	50	28
Prince Edward Island	19	64	16	13	49	38
Nova Scotia	13	55	32	–	48	35
New Brunswick	17	65	18	18	54	28
Quebec	31	55	14	20	54	26
Ontario	23	60	17	15	57	28
West	36	48	16	19	55	26
Manitoba	16	62	21	14	51	35
Saskatchewan	23	52	24	20	55	25
Alberta	41	46	13	23	51	26
British Columbia	41	45	14	18	59	23
North	51	40	9	31	52	17
Northwest Territories	30	51	19	25	61	15
Yukon	65	32	–	34	47	19
ENERGY EXPENDITURE						
Active (3 KKD ¹)	31	56	13	27	54	18
Moderately active (1.5–2.9 KKD)	28	54	17	15	59	26
Somewhat active (0.5–1.4 KKD)	25	56	19	11	58	31
Sedentary (<0.5 KKD)	23	52	26	–	44	53

1 Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Community infrastructure: recreation trails (cont'd)

1999 Physical Activity Monitor

	Amount of multi-purpose recreation trails			How often these places are used		
	Many	Some	None	Frequently	Sometimes	Not at all
EDUCATION LEVEL						
Less than secondary	24%	56%	20%	11%	52%	37%
Secondary	27	56	17	15	55	31
College	27	55	18	20	56	24
University	33	53	14	23	57	20
HOUSEHOLD INCOME						
< \$20,000	25	51	24	14	53	34
\$20,000–29,999	23	58	19	15	48	37
\$30,000–39,999	28	60	12	18	56	27
\$40,000–59,999	32	53	15	16	59	25
\$60,000–79,999	26	55	19	18	61	21
\$80,000–99,999	30	57	13	24	61	15
\$100,000	41	46	13	29	55	16
EMPLOYMENT STATUS						
Full-time worker	29	56	15	19	58	23
Part-time worker	27	54	19	16	62	22
Unemployed	28	53	19	–	48	34
Homemaker	24	52	24	20	38	42
Student	24	57	19	15	70	16
Retired	29	54	17	16	43	41
COMMUNITY SIZE						
< 1,000	9	51	40	13	46	40
1,000–9,999	23	54	22	16	51	33
10,000–74,999	31	58	11	20	56	24
75,000–299,999	38	54	9	19	61	21
300,000	33	54	14	20	57	23
FAMILY COMPOSITION						
Living with a partner	30	54	17	19	54	27
with children at home	28	53	19	17	58	24
without children at home	30	54	16	20	50	29
Widowed, divorced, separated	28	56	16	13	50	37
with children at home	34	47	19	16	59	–
without children at home	27	58	15	12	48	40
Never married	25	57	17	17	61	22
with children at home	26	55	–	–	59	–
without children at home	25	58	17	17	62	22

– Data unavailable because of insufficient sample size.

Community infrastructure: recreation trails (cont'd)

1999 Physical Activity Monitor

	Importance of having multi-purpose recreation trails			If there were more such places, would be active...		
	Very important	Somewhat important	Not important	More often	As often	Less often
TOTAL, ADULTS (18+)	55%	38%	6%	32%	66%	2%
women	58	36	6	34	63	3
men	52	41	7	30	69	—
18–24	46	49	—	37	62	—
women	47	50	—	43	57	—
men	46	48	—	32	67	—
25–44	59	37	4	34	65	—
women	62	35	4	36	62	—
men	57	39	4	31	68	—
45–64	53	39	8	30	68	—
women	58	35	6	30	67	—
men	49	42	9	30	69	—
65+	54	29	17	18	74	—
women	59	26	15	22	70	—
men	49	32	19	—	80	—
REGION						
East	52	39	10	36	63	—
Newfoundland	55	37	—	41	57	—
Prince Edward Island	56	37	—	28	71	—
Nova Scotia	46	39	—	38	62	—
New Brunswick	55	39	6	32	66	—
Quebec	58	39	—	29	67	—
Ontario	54	40	6	35	63	—
West	56	35	9	28	70	—
Manitoba	51	40	—	33	65	—
Saskatchewan	50	37	14	26	71	—
Alberta	59	32	—	25	74	—
British Columbia	57	35	—	30	69	—
North	62	32	7	23	75	—
Northwest Territories	53	37	10	28	67	—
Yukon	67	28	—	19	80	—
ENERGY EXPENDITURE						
Active (≥ 3 KKD ¹)	60	34	6	31	67	2
Moderately active (1.5–2.9 KKD)	56	38	7	33	65	—
Somewhat active (0.5–1.4 KKD)	50	45	5	34	63	—
Sedentary (<0.5 KKD)	47	42	11	25	72	—

¹ Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

— Data unavailable because of insufficient sample size.

Community infrastructure: recreation trails (cont'd)

1999 Physical Activity Monitor

	Importance of having multi-purpose recreation trails			If there were more such places, would be active...		
	Very important	Somewhat important	Not important	More often	As often	Less often
EDUCATION LEVEL						
Less than secondary	50%	42%	8%	31%	66%	4%
Secondary	53	41	6	32	65	—
College	56	37	7	32	67	—
University	60	34	5	32	67	—
HOUSEHOLD INCOME						
< \$20,000	54	38	8	37	59	—
\$20,000–29,999	48	46	7	30	65	—
\$30,000–39,999	58	39	—	28	71	—
\$40,000–59,999	58	38	4	33	66	—
\$60,000–79,999	57	35	8	33	66	—
\$80,000–99,999	56	41	—	34	64	—
\$100,000	62	28	—	30	70	—
EMPLOYMENT STATUS						
Full-time worker	58	37	5	31	68	2
Part-time worker	57	38	—	34	66	—
Unemployed	35	59	—	26	71	—
Homemaker	54	39	—	31	62	—
Student	47	50	—	46	54	—
Retired	53	34	13	26	69	—
COMMUNITY SIZE						
< 1,000	47	40	13	41	58	—
1,000–9,999	54	39	8	32	66	—
10,000–74,999	57	39	4	24	75	—
75,000–299,999	60	36	—	32	67	—
300,000	58	36	7	33	63	—
FAMILY COMPOSITION						
Living with a partner	56	37	7	31	67	2
with children at home	60	37	3	32	67	—
without children at home	53	38	9	30	68	—
Widowed, divorced, separated	58	32	9	27	68	—
with children at home	65	30	—	42	55	—
without children at home	56	33	11	22	72	—
Never married	52	43	5	35	63	—
with children at home	61	32	—	35	62	—
without children at home	50	45	5	35	63	—

— Data unavailable because of insufficient sample size.

Community infrastructure: designated facilities

1999 Physical Activity Monitor

	Amount of facilities designed for physical activity			How often these places are used		
	Many	Some	None	Frequently	Sometimes	Not at all
TOTAL, ADULTS (18+)	44%	50%	6%	16%	45%	39%
women	43	51	7	14	45	40
men	46	49	5	17	45	37
18–24	50	46	–	25	53	22
women	43	54	–	20	54	26
men	57	38	–	30	52	18
25–44	46	49	5	16	50	34
women	45	49	6	15	50	35
men	46	50	4	18	50	32
45–64	41	51	8	11	42	47
women	40	52	8	11	41	48
men	43	50	7	11	42	46
65+	40	52	8	11	24	66
women	40	51	9	–	24	64
men	39	53	–	–	23	67
REGION						
East	29	55	16	12	46	42
Newfoundland	25	53	21	–	54	35
Prince Edward Island	24	55	21	–	50	36
Nova Scotia	33	53	14	–	39	51
New Brunswick	29	59	13	14	49	37
Quebec	44	52	–	15	42	43
Ontario	44	51	6	15	42	42
West	51	44	5	18	51	31
Manitoba	33	57	–	14	44	42
Saskatchewan	39	50	11	14	51	35
Alberta	47	49	–	18	52	30
British Columbia	62	36	–	20	54	27
North	42	54	–	19	53	28
Northwest Territories	40	56	–	19	56	25
Yukon	43	53	–	19	51	30
ENERGY EXPENDITURE						
Active (3 KKD ¹)	49	47	4	28	47	25
Moderately active (1.5–2.9 KKD)	46	48	5	12	49	39
Somewhat active (0.5–1.4 KKD)	38	55	7	7	45	48
Sedentary (<0.5 KKD)	38	52	10	–	30	68

1 Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Community infrastructure: designated facilities (cont'd)

1999 Physical Activity Monitor

	Amount of facilities designed for physical activity			How often these places are used		
	Many	Some	None	Frequently	Sometimes	Not at all
EDUCATION LEVEL						
Less than secondary	34%	54%	12%	10%	35%	55%
Secondary	45	48	7	15	46	39
College	45	50	5	16	50	34
University	50	47	3	19	47	34
HOUSEHOLD INCOME						
< \$20,000	36	54	11	12	37	51
\$20,000–29,999	40	51	8	15	42	43
\$30,000–39,999	41	54	4	11	48	41
\$40,000–59,999	45	51	4	18	48	35
\$60,000–79,999	53	41	–	19	45	36
\$80,000–99,999	50	45	–	23	47	30
\$100,000	55	42	–	16	47	37
EMPLOYMENT STATUS						
Full-time worker	46	49	5	16	47	37
Part-time worker	42	52	6	19	47	34
Unemployed	38	52	–	–	56	43
Homemaker	51	44	–	–	44	41
Student	48	48	–	28	53	19
Retired	38	52	10	9	31	59
COMMUNITY SIZE						
< 1,000	7	62	32	6	45	49
1,000–9,999	28	64	7	15	44	42
10,000–74,999	51	47	–	15	46	39
75,000–299,999	65	34	–	21	47	32
300,000	55	43	–	18	45	37
FAMILY COMPOSITION						
Living with a partner	43	50	7	14	46	40
with children at home	44	50	6	17	55	29
without children at home	43	49	7	12	39	49
Widowed, divorced, separated	45	49	5	14	37	50
with children at home	51	47	–	22	44	33
without children at home	44	50	6	11	34	55
Never married	47	49	4	21	47	32
with children at home	40	57	–	–	60	25
without children at home	48	48	4	22	46	33

– Data unavailable because of insufficient sample size.

Community infrastructure: designated facilities (cont'd)

1999 Physical Activity Monitor

	Importance of having facilities designed for physical activity			If there were more such places, would be active...		
	Very important	Somewhat important	Not important	More often	As often	Less often
TOTAL, ADULTS (18+)	53%	39%	8%	28%	71%	2%
women	55	38	7	31	67	3
men	51	41	8	24	75	1
18–24	56	40	–	32	68	–
women	55	41	–	38	62	–
men	57	40	–	27	73	–
25–44	56	38	5	31	67	–
women	56	38	5	33	64	–
men	56	38	5	29	70	–
45–64	47	42	11	24	74	–
women	51	38	11	29	69	–
men	43	47	10	19	79	–
65+	48	35	17	15	81	–
women	55	33	11	16	76	–
men	40	36	24	–	87	–
REGION						
East	54	36	10	32	65	–
Newfoundland	57	34	–	38	58	–
Prince Edward Island	54	39	–	25	73	–
Nova Scotia	50	36	14	33	66	–
New Brunswick	56	37	7	30	68	–
Quebec	50	45	–	31	65	–
Ontario	51	40	9	26	72	–
West	57	35	8	25	74	–
Manitoba	50	41	9	22	75	–
Saskatchewan	52	37	–	22	76	–
Alberta	60	32	–	27	72	–
British Columbia	59	34	–	26	74	–
North	65	28	7	26	72	–
Northwest Territories	60	34	–	31	67	–
Yukon	69	24	–	24	76	–
ENERGY EXPENDITURE						
Active (≥ 3 KKD ¹)	61	32	7	29	69	2
Moderately active (1.5–2.9 KKD)	51	42	7	27	72	–
Somewhat active (0.5–1.4 KKD)	47	46	7	28	69	–
Sedentary (<0.5 KKD)	44	41	16	22	75	–

1 Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Community infrastructure: designated facilities (cont'd)

1999 Physical Activity Monitor

	Importance of having facilities designed for physical activity			If there were more such places, would be active...		
	Very important	Somewhat important	Not important	More often	As often	Less often
EDUCATION LEVEL						
Less than secondary	43%	45%	11%	27%	68%	5%
Secondary	51	42	7	30	69	—
College	54	38	8	25	73	—
University	59	34	7	28	71	—
HOUSEHOLD INCOME						
< \$20,000	46	44	11	36	62	—
\$20,000–29,999	46	44	9	25	70	—
\$30,000–39,999	50	45	5	26	73	—
\$40,000–59,999	58	36	6	28	70	—
\$60,000–79,999	54	38	—	25	74	—
\$80,000–99,999	54	38	—	32	67	—
\$100,000	60	31	—	25	74	—
EMPLOYMENT STATUS						
Full-time worker	55	38	7	28	71	—
Part-time worker	56	40	—	29	69	—
Unemployed	36	53	—	31	65	—
Homemaker	53	42	—	33	62	—
Student	54	41	—	36	64	—
Retired	45	39	16	20	75	—
COMMUNITY SIZE						
< 1,000	41	44	14	37	61	—
1,000–9,999	53	40	8	35	63	—
10,000–74,999	52	41	7	22	75	—
75,000–299,999	58	37	5	20	79	—
300,000	56	35	9	26	73	—
FAMILY COMPOSITION						
Living with a partner	53	39	8	28	70	2
with children at home	60	37	3	34	66	—
without children at home	47	41	12	24	74	—
Widowed, divorced, separated	54	34	11	24	71	—
with children at home	67	27	—	34	61	—
without children at home	50	37	13	20	74	—
Never married	53	40	6	28	71	—
with children at home	64	31	—	30	69	—
without children at home	52	42	7	28	71	—

— Data unavailable because of insufficient sample size.

Community infrastructure: non-designated places

1999 Physical Activity Monitor

	Amount of other places to be active			How often these places are used		
	Many	Some	None	Frequently	Sometimes	Not at all
TOTAL, ADULTS (18+)	27%	64%	9%	6%	37%	56%
women	27	65	9	5	35	60
men	27	63	10	7	40	53
18–24	24	68	8	13	48	39
women	26	67	–	–	38	52
men	21	70	–	16	58	26
25–44	28	63	9	7	44	49
women	29	63	8	5	41	54
men	27	64	9	9	47	44
45–64	26	64	9	3	27	70
women	24	68	8	–	27	69
men	29	61	10	–	26	71
65+	26	60	14	–	19	77
women	24	60	16	–	22	73
men	29	59	–	–	–	82
REGION						
East	16	72	12	6	29	65
Newfoundland	14	72	–	–	31	63
Prince Edward Island	12	71	17	–	36	60
Nova Scotia	17	72	–	–	20	73
New Brunswick	16	73	11	–	36	58
Quebec	21	67	12	–	37	57
Ontario	26	65	9	6	35	59
West	36	58	6	7	42	51
Manitoba	26	67	–	–	36	59
Saskatchewan	28	60	–	–	42	50
Alberta	32	61	–	–	36	56
British Columbia	43	53	–	–	48	45
North	36	59	5	11	42	47
Northwest Territories	29	65	–	15	43	42
Yukon	41	54	–	–	41	51
ENERGY EXPENDITURE						
Active (≥ 3 KKD ¹)	30	63	8	12	43	44
Moderately active (1.5–2.9 KKD)	27	63	9	4	41	55
Somewhat active (0.5–1.4 KKD)	22	70	8	–	26	72
Sedentary (<0.5 KKD)	26	58	16	–	25	73

1 Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Community infrastructure: non-designated places (cont'd)

1999 Physical Activity Monitor

	Amount of other places to be active			How often these places are used		
	Many	Some	None	Frequently	Sometimes	Not at all
EDUCATION LEVEL						
Less than secondary	19%	66%	14%	5%	28%	66%
Secondary	30	63	8	8	41	51
College	22	67	11	6	38	56
University	32	62	6	6	38	56
HOUSEHOLD INCOME						
< \$20,000	21	65	15	5	32	63
\$20,000–29,999	20	70	11	–	37	56
\$30,000–39,999	27	62	10	–	42	54
\$40,000–59,999	27	66	7	10	40	51
\$60,000–79,999	34	59	–	–	39	58
\$80,000–99,999	30	64	–	–	34	52
\$100,000	34	58	–	–	36	58
EMPLOYMENT STATUS						
Full-time worker	29	63	8	6	37	57
Part-time worker	22	71	7	7	49	44
Unemployed	–	67	–	–	38	61
Homemaker	31	63	–	–	39	52
Student	21	65	–	16	44	40
Retired	21	64	14	–	23	74
COMMUNITY SIZE						
< 1,000	–	63	33	–	36	61
1,000–9,999	16	74	10	7	37	55
10,000–74,999	30	65	5	6	37	57
75,000–299,999	40	55	–	7	36	57
300,000	36	57	8	7	40	52
FAMILY COMPOSITION						
Living with a partner	27	64	9	6	36	58
with children at home	26	64	10	7	46	47
without children at home	28	63	9	6	28	66
Widowed, divorced, separated	27	64	9	–	31	65
with children at home	34	60	–	–	40	55
without children at home	25	66	9	–	28	68
Never married	26	64	10	8	44	48
with children at home	36	58	–	–	49	43
without children at home	25	65	10	8	43	49

– Data unavailable because of insufficient sample size.

Community infrastructure: non-designated places (cont'd)

1999 Physical Activity Monitor

	Importance of having other places to be active			If there were more such places, would be active...		
	Very important	Somewhat important	Not important	More often	As often	Less often
TOTAL, ADULTS (18+)	46%	44%	10%	21%	76%	3%
women	47	43	10	21	75	4
men	44	46	10	20	77	2
18–24	41	51	8	23	74	–
women	37	53	–	19	77	–
men	44	49	–	27	71	–
25–44	49	44	7	23	74	3
women	49	44	6	25	72	–
men	49	43	8	22	76	–
45–64	43	47	11	18	80	–
women	46	41	12	19	78	–
men	39	52	9	17	82	–
65+	46	33	22	14	79	7
women	52	29	18	–	75	–
men	38	36	25	–	84	–
REGION						
East	48	39	13	22	75	3
Newfoundland	49	39	–	27	71	–
Prince Edward Island	51	40	–	24	73	–
Nova Scotia	43	38	19	19	79	–
New Brunswick	53	39	8	23	74	–
Quebec	43	52	–	25	68	–
Ontario	46	44	10	21	77	–
West	48	40	12	17	82	–
Manitoba	49	41	10	17	79	–
Saskatchewan	45	41	14	16	82	–
Alberta	50	39	–	14	85	–
British Columbia	47	40	–	19	80	–
North	61	32	8	20	78	–
Northwest Territories	61	33	–	24	73	–
Yukon	61	31	–	16	82	–
ENERGY EXPENDITURE						
Active (≥ 3 KKD ¹)	52	40	9	22	76	2
Moderately active (1.5–2.9 KKD)	44	47	10	22	75	–
Somewhat active (0.5–1.4 KKD)	42	48	10	19	78	–
Sedentary (<0.5 KKD)	41	47	13	16	75	9

1 Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Community infrastructure: non-designated places (cont'd)

1999 Physical Activity Monitor

	Importance of having other places to be active			If there were more such places, would be active...		
	Very important	Somewhat important	Not important	More often	As often	Less often
EDUCATION LEVEL						
Less than secondary	43%	45%	12%	20%	73%	7%
Secondary	50	41	8	24	74	—
College	46	46	8	20	77	—
University	44	46	11	19	79	—
HOUSEHOLD INCOME						
< \$20,000	47	44	10	28	64	8
\$20,000–29,999	42	44	14	21	73	—
\$30,000–39,999	47	48	5	21	78	—
\$40,000–59,999	51	42	7	23	74	—
\$60,000–79,999	47	43	10	17	83	—
\$80,000–99,999	41	48	—	18	81	—
\$100,000	42	50	—	20	80	—
EMPLOYMENT STATUS						
Full-time worker	47	44	9	20	78	3
Part-time worker	52	45	—	25	73	—
Unemployed	32	58	—	28	67	—
Homemaker	51	39	—	25	71	—
Student	39	52	—	28	71	—
Retired	43	40	17	16	77	7
COMMUNITY SIZE						
< 1,000	38	49	13	28	67	—
1,000–9,999	49	43	9	23	75	—
10,000–74,999	46	45	9	16	80	4
75,000–299,999	49	40	11	20	78	—
300,000	47	44	9	19	78	—
FAMILY COMPOSITION						
Living with a partner	47	44	9	21	76	3
with children at home	53	43	4	26	72	—
without children at home	42	44	13	16	80	4
Widowed, divorced, separated	52	34	14	19	75	5
with children at home	59	36	—	28	71	—
without children at home	50	34	16	16	77	7
Never married	42	49	9	22	75	—
with children at home	58	35	—	27	71	—
without children at home	39	51	10	21	76	—

— Data unavailable because of insufficient sample size.

Opportunities to be active in the community: support services

1999 Physical Activity Monitor

	Amount of support services			How often these services are used		
	Many	Some	None	Frequently	Sometimes	Not at all
TOTAL, ADULTS (18+)	17%	66%	17%	4%	31%	66%
women	16	65	20	3	30	67
men	18	67	15	4	32	64
18–24	13	66	21	–	34	61
women	–	67	21	–	36	63
men	–	65	21	–	33	60
25–44	16	66	18	4	36	60
women	15	65	20	4	34	61
men	17	67	15	–	38	58
45–64	17	67	15	–	22	76
women	15	67	18	–	22	76
men	20	67	13	–	22	75
65+	25	60	15	–	27	70
women	28	54	18	–	25	71
men	–	66	13	–	29	68
REGION						
East	8	64	28	–	29	68
Newfoundland	–	58	35	–	33	62
Prince Edward Island	–	62	31	–	37	61
Nova Scotia	–	67	22	–	18	80
New Brunswick	6	64	30	–	40	58
Quebec	15	59	26	–	34	62
Ontario	15	71	14	4	30	66
West	23	65	12	–	31	66
Manitoba	–	70	21	–	30	67
Saskatchewan	13	65	22	–	34	64
Alberta	20	65	15	–	33	64
British Columbia	32	64	–	–	30	67
North	18	67	15	–	36	58
Northwest Territories	13	67	20	–	37	58
Yukon	22	67	–	–	36	58
ENERGY EXPENDITURE						
Active (≥ 3 KKD ¹)	19	65	16	6	36	57
Moderately active (1.5–2.9 KKD)	18	65	17	–	32	66
Somewhat active (0.5–1.4 KKD)	12	71	17	–	26	71
Sedentary (<0.5 KKD)	13	62	25	–	17	83

1 Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Opportunities to be active in the community: support services (cont'd)

1999 Physical Activity Monitor

	Amount of support services			How often these services are used		
	Many	Some	None	Frequently	Sometimes	Not at all
EDUCATION LEVEL						
Less than secondary	16%	62%	23%	–	25%	72%
Secondary	19	65	17	5	35	59
College	15	66	19	–	35	62
University	17	69	14	3	28	70
HOUSEHOLD INCOME						
< \$20,000	17	60	22	–	35	63
\$20,000–29,999	11	68	20	–	28	70
\$30,000–39,999	16	67	17	–	35	62
\$40,000–59,999	17	64	19	–	35	61
\$60,000–79,999	14	69	17	–	28	69
\$80,000–99,999	20	67	13	–	34	60
\$100,000	20	67	13	–	24	74
EMPLOYMENT STATUS						
Full-time worker	17	67	16	3	30	66
Part-time worker	14	68	18	–	33	64
Unemployed	–	58	26	–	29	70
Homemaker	22	58	19	–	37	58
Student	–	68	22	–	38	55
Retired	22	62	17	–	26	71
COMMUNITY SIZE						
< 1,000	–	45	53	–	34	64
1,000–9,999	9	66	25	–	35	61
10,000–74,999	19	68	13	3	33	64
75,000–299,999	26	68	6	–	25	72
300,000	23	69	8	–	31	65
FAMILY COMPOSITION						
Living with a partner	17	65	18	3	32	65
with children at home	12	66	22	4	37	59
without children at home	21	64	15	–	28	70
Widowed, divorced, separated	21	62	17	–	23	72
with children at home	–	60	23	–	29	66
without children at home	22	63	15	–	21	75
Never married	14	69	17	–	32	64
with children at home	–	64	22	–	37	60
without children at home	14	70	16	–	31	65

– Data unavailable because of insufficient sample size.

Opportunities to be active in the community: support services (cont'd)

1999 Physical Activity Monitor

	Importance of having support services			If there were more such services, would be active...		
	Very important	Somewhat important	Not important	More often	As often	Less often
TOTAL, ADULTS (18+)	35%	48%	17%	20%	76%	3%
women	36	48	16	23	73	3
men	34	48	18	18	80	3
18–24	22	60	18	16	81	–
women	24	58	18	19	79	–
men	20	61	18	14	84	–
25–44	38	48	14	25	72	3
women	38	49	13	29	68	–
men	38	46	16	22	76	–
45–64	36	46	18	17	79	–
women	35	46	19	19	78	–
men	37	46	17	15	81	–
65+	41	33	26	13	81	–
women	48	30	23	–	75	–
men	34	37	29	–	87	–
REGION						
East	33	46	21	23	75	–
Newfoundland	35	48	17	21	78	–
Prince Edward Island	34	50	16	18	79	–
Nova Scotia	28	43	28	23	74	–
New Brunswick	38	47	15	24	73	–
Quebec	43	49	–	23	70	–
Ontario	33	48	19	22	77	–
West	33	46	21	17	81	–
Manitoba	30	47	23	16	81	–
Saskatchewan	26	47	26	–	86	–
Alberta	31	53	16	17	81	–
British Columbia	36	41	23	18	80	–
North	39	43	18	23	75	–
Northwest Territories	38	42	21	23	74	–
Yukon	40	44	16	23	75	–
ENERGY EXPENDITURE						
Active (≥ 3 KKD ¹)	36	45	19	19	79	2
Moderately active (1.5–2.9 KKD)	34	50	16	21	77	–
Somewhat active (0.5–1.4 KKD)	37	48	16	22	74	–
Sedentary (<0.5 KKD)	34	51	16	21	72	–

¹ Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Opportunities to be active in the community: support services (cont'd)

1999 Physical Activity Monitor

	Importance of having support services			If there were more such services, would be active...		
	Very important	Somewhat important	Not important	More often	As often	Less often
EDUCATION LEVEL						
Less than secondary	37%	46%	17%	20%	73%	7%
Secondary	36	50	14	21	76	—
College	36	50	14	23	75	—
University	34	45	21	18	80	—
HOUSEHOLD INCOME						
< \$20,000	36	51	13	30	65	—
\$20,000–29,999	35	50	15	20	75	—
\$30,000–39,999	37	50	12	21	76	—
\$40,000–59,999	42	43	15	23	75	—
\$60,000–79,999	32	51	18	17	82	—
\$80,000–99,999	31	47	22	17	82	—
\$100,000	28	48	24	16	83	—
EMPLOYMENT STATUS						
Full-time worker	36	46	17	20	78	3
Part-time worker	36	50	14	24	75	—
Unemployed	21	65	—	21	68	—
Homemaker	40	48	12	33	62	—
Student	26	58	—	24	75	—
Retired	39	40	21	16	79	6
COMMUNITY SIZE						
< 1,000	29	49	22	26	72	—
1,000–9,999	38	47	15	22	75	—
10,000–74,999	36	49	16	17	79	—
75,000–299,999	36	45	19	19	80	—
300,000	36	46	18	20	79	—
FAMILY COMPOSITION						
Living with a partner	37	47	16	22	75	3
with children at home	38	50	12	28	70	—
without children at home	36	44	20	17	80	—
Widowed, divorced, separated	43	38	19	19	76	5
with children at home	47	41	13	36	60	—
without children at home	42	37	21	13	81	—
Never married	28	54	18	18	79	—
with children at home	38	46	—	26	73	—
without children at home	26	55	19	17	80	—

— Data unavailable because of insufficient sample size.

Adults' barriers to becoming more active

1999 Physical Activity Monitor

	Lack of skill		Cost is too high	
	Strongly agree	Agree	Strongly agree	Agree
TOTAL, ADULTS (18+)	17%	9%	25%	12%
women	21	9	32	13
men	13	9	19	11
18–24	8	–	29	13
women	–	–	34	14
men	–	–	24	13
25–44	15	8	27	13
women	19	9	36	14
men	11	7	17	12
45–64	21	11	21	11
women	23	8	24	12
men	18	13	18	9
65+	30	16	27	11
women	40	14	29	12
men	18	–	24	–
REGION				
East	21	9	31	13
Newfoundland	21	–	26	–
Prince Edward Island	21	–	26	13
Nova Scotia	23	–	32	14
New Brunswick	18	13	33	12
Quebec	19	–	28	12
Ontario	16	10	24	13
West	16	9	24	11
Manitoba	15	–	22	12
Saskatchewan	16	–	24	–
Alberta	18	–	24	12
British Columbia	15	–	25	–
North	13	9	23	12
Northwest Territories	17	13	25	11
Yukon	–	–	22	–
ENERGY EXPENDITURE				
Active (≥ 3 KKD ¹)	10	7	24	12
Moderately active (1.5–2.9 KKD)	16	8	23	13
Somewhat active (0.5–1.4 KKD)	21	12	27	12
Sedentary (<0.5 KKD)	34	13	33	12

¹ Kilojoules/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Adults' barriers to becoming more active (cont'd)

1999 Physical Activity Monitor

	Lack of skill		Cost is too high	
	Strongly agree	Agree	Strongly agree	Agree
EDUCATION LEVEL				
Less than secondary	26%	13%	34%	11%
Secondary	18	10	28	12
College	15	7	27	13
University	13	7	18	13
HOUSEHOLD INCOME				
< \$20,000	26	13	42	11
\$20,000–29,999	19	9	36	10
\$30,000–39,999	17	9	29	13
\$40,000–59,999	16	10	25	15
\$60,000–79,999	13	10	14	12
\$80,000–99,999	17	–	14	12
\$100,000	–	–	9	–
EMPLOYMENT STATUS				
Full-time worker	15	7	22	12
Part-time worker	17	10	28	18
Unemployed	23	–	48	–
Homemaker	22	13	35	–
Student	–	–	29	17
Retired	26	14	27	11
COMMUNITY SIZE				
< 1,000	20	10	17	13
1,000–9,999	19	11	30	10
10,000–74,999	15	11	24	13
75,000–299,999	15	7	24	15
300,000	16	6	21	12
FAMILY COMPOSITION				
Living with a partner	18	9	23	12
with children at home	18	10	23	12
without children at home	18	9	23	11
Widowed, divorced, separated	23	11	32	15
with children at home	–	–	28	–
without children at home	26	12	33	15
Never married	13	8	28	13
with children at home	15	–	36	–
without children at home	12	8	27	13

– Data unavailable because of insufficient sample size.

Adults' barriers to becoming more active (cont'd)

1999 Physical Activity Monitor

	Not enough information about local physical activity opportunities		Don't know how to build more physical activity into lifestyle	
	Strongly agree	Agree	Strongly agree	Agree
TOTAL, ADULTS (18+)	17%	17%	12%	9%
women	18	18	13	10
men	17	15	10	8
18–24	13	22	7	6
women	11	23	–	–
men	16	21	–	–
25–44	16	16	12	8
women	17	15	12	9
men	15	16	12	6
45–64	19	15	11	13
women	18	18	14	12
men	20	13	9	13
65+	26	18	19	12
women	30	26	22	12
men	21	–	–	–
REGION				
East	22	21	15	10
Newfoundland	24	22	16	–
Prince Edward Island	23	21	15	–
Nova Scotia	18	20	17	–
New Brunswick	24	20	14	12
Quebec	20	16	14	11
Ontario	17	19	12	8
West	16	14	10	8
Manitoba	16	16	–	9
Saskatchewan	15	15	–	–
Alberta	12	15	–	–
British Columbia	19	–	–	–
North	14	15	9	8
Northwest Territories	16	16	11	12
Yukon	13	15	–	–
ENERGY EXPENDITURE				
Active (≥ 3 KKD ¹)	17	19	9	6
Moderately active (1.5–2.9 KKD)	15	16	11	8
Somewhat active (0.5–1.4 KKD)	20	16	15	14
Sedentary (<0.5 KKD)	20	16	17	15

¹ Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Adults' barriers to becoming more active (cont'd)

1999 Physical Activity Monitor

	Not enough information about local physical activity opportunities		Don't know how to build more physical activity into lifestyle	
	Strongly agree	Agree	Strongly agree	Agree
EDUCATION LEVEL				
Less than secondary	27%	18%	19%	15%
Secondary	19	17	12	10
College	16	17	10	8
University	13	15	9	7
HOUSEHOLD INCOME				
< \$20,000	27	15	19	14
\$20,000–29,999	22	17	15	12
\$30,000–39,999	20	15	11	8
\$40,000–59,999	16	18	14	10
\$60,000–79,999	10	18	7	–
\$80,000–99,999	12	14	–	–
\$100,000	12	12	–	–
EMPLOYMENT STATUS				
Full-time worker	14	16	11	8
Part-time worker	22	13	10	9
Unemployed	24	16	–	–
Homemaker	28	14	11	13
Student	13	25	–	–
Retired	23	19	18	14
COMMUNITY SIZE				
< 1,000	24	19	12	11
1,000–9,999	20	19	12	10
10,000–74,999	15	15	12	8
75,000–299,999	16	17	8	9
300,000	14	15	11	8
FAMILY COMPOSITION				
Living with a partner	17	16	12	10
with children at home	15	15	12	10
without children at home	19	17	12	10
Widowed, divorced, separated	20	17	14	11
with children at home	22	–	–	–
without children at home	20	18	16	12
Never married	17	17	10	7
with children at home	27	–	–	–
without children at home	15	17	11	7

– Data unavailable because of insufficient sample size.

Adults' barriers to becoming more active (cont'd)

1999 Physical Activity Monitor

	Hours and class times offered by local centres not suitable		Too hard to get to places to be active	
	Strongly agree	Agree	Strongly agree	Agree
TOTAL, ADULTS (18+)	23%	14%	14%	7%
women	25	15	16	8
men	20	12	11	6
18–24	23	15	10	10
women	22	17	14	–
men	24	–	–	–
25–44	24	13	12	6
women	27	13	14	8
men	20	13	9	4
45–64	20	13	15	6
women	22	17	15	5
men	18	10	15	7
65+	23	14	26	9
women	29	13	32	–
men	–	–	20	–
REGION				
East	26	15	19	9
Newfoundland	26	15	19	–
Prince Edward Island	26	–	18	–
Nova Scotia	27	17	19	–
New Brunswick	26	13	20	9
Quebec	23	18	14	–
Ontario	24	12	14	8
West	19	12	12	6
Manitoba	21	11	13	9
Saskatchewan	23	–	14	–
Alberta	20	15	15	–
British Columbia	17	–	–	–
North	20	14	10	6
Northwest Territories	23	13	11	–
Yukon	18	14	–	–
ENERGY EXPENDITURE				
Active (≥ 3 KKD ¹)	22	10	11	7
Moderately active (1.5–2.9 KKD)	21	14	12	6
Somewhat active (0.5–1.4 KKD)	23	17	17	8
Sedentary (<0.5 KKD)	27	17	23	7

1 Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Adults' barriers to becoming more active (cont'd)

1999 Physical Activity Monitor

	Hours and class times offered by local centres not suitable		Too hard to get to places to be active	
	Strongly agree	Agree	Strongly agree	Agree
EDUCATION LEVEL				
Less than secondary	24%	15%	27%	7%
Secondary	24	12	15	7
College	22	13	10	5
University	21	15	9	8
HOUSEHOLD INCOME				
< \$20,000	32	12	29	8
\$20,000–29,999	25	15	19	8
\$30,000–39,999	20	13	13	8
\$40,000–59,999	21	13	10	7
\$60,000–79,999	21	12	7	–
\$80,000–99,999	18	15	–	–
\$100,000	19	13	–	–
EMPLOYMENT STATUS				
Full-time worker	22	12	10	6
Part-time worker	27	17	13	7
Unemployed	27	–	22	–
Homemaker	20	19	22	–
Student	16	–	10	–
Retired	22	13	26	10
COMMUNITY SIZE				
< 1,000	24	21	25	6
1,000–9,999	26	12	16	8
10,000–74,999	19	12	10	6
75,000–299,999	21	16	10	7
300,000	23	12	12	7
FAMILY COMPOSITION				
Living with a partner	22	14	13	6
with children at home	22	13	11	7
without children at home	21	14	14	6
Widowed, divorced, separated	26	12	24	8
with children at home	31	–	19	–
without children at home	24	13	25	8
Never married	24	14	12	8
with children at home	26	–	19	–
without children at home	23	14	11	8

– Data unavailable because of insufficient sample size.

Adults' barriers to becoming more active (cont'd)

1999 Physical Activity Monitor

	Not enough programs, services, facilities in the community		Programs and facilities are not the right type	
	Strongly agree	Agree	Strongly agree	Agree
TOTAL, ADULTS (18+)	17%	19%	19%	13%
women	20	19	21	13
men	14	18	17	12
18–24	15	17	13	14
women	19	18	16	14
men	11	17	10	14
25–44	16	17	19	12
women	18	17	21	12
men	14	17	18	11
45–64	18	21	19	12
women	19	22	21	12
men	16	19	16	12
65+	23	23	26	17
women	30	22	26	17
men	15	24	25	–
REGION				
East	26	23	25	15
Newfoundland	29	22	23	15
Prince Edward Island	26	20	21	14
Nova Scotia	28	23	25	13
New Brunswick	23	23	27	17
Quebec	18	21	17	12
Ontario	17	18	19	14
West	14	16	17	12
Manitoba	14	19	18	14
Saskatchewan	16	17	17	15
Alberta	15	17	17	14
British Columbia	12	15	17	–
North	16	20	17	15
Northwest Territories	18	20	17	17
Yukon	15	19	17	–
ENERGY EXPENDITURE				
Active (≥ 3 KKD ¹)	17	18	16	12
Moderately active (1.5–2.9 KKD)	15	18	21	11
Somewhat active (0.5–1.4 KKD)	15	22	19	14
Sedentary (<0.5 KKD)	26	16	22	19

¹ Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Adults' barriers to becoming more active (cont'd)

1999 Physical Activity Monitor

	Not enough programs, services, facilities in the community		Programs and facilities are not the right type	
	Strongly agree	Agree	Strongly agree	Agree
EDUCATION LEVEL				
Less than secondary	28%	21%	27%	17%
Secondary	16	18	17	14
College	16	19	19	10
University	13	17	15	12
HOUSEHOLD INCOME				
< \$20,000	26	19	28	14
\$20,000–29,999	20	18	19	15
\$30,000–39,999	22	20	19	14
\$40,000–59,999	14	23	17	11
\$60,000–79,999	11	17	13	12
\$80,000–99,999	13	13	17	13
\$100,000	12	13	16	11
EMPLOYMENT STATUS				
Full-time worker	15	18	16	13
Part-time worker	14	18	23	12
Unemployed	24	13	31	–
Homemaker	24	18	19	17
Student	20	19	18	–
Retired	22	24	25	15
COMMUNITY SIZE				
< 1,000	31	17	27	9
1,000–9,999	24	21	24	14
10,000–74,999	13	20	13	13
75,000–299,999	13	15	15	11
300,000	12	16	16	11
FAMILY COMPOSITION				
Living with a partner	17	18	18	12
with children at home	17	16	17	11
without children at home	18	20	20	12
Widowed, divorced, separated	20	20	22	14
with children at home	22	20	25	12
without children at home	19	20	21	15
Never married	15	18	18	15
with children at home	–	–	25	–
without children at home	15	18	17	16

– Data unavailable because of insufficient sample size.

Adults' barriers to becoming more active (cont'd)

1999 Physical Activity Monitor

	Hard to find other people to be active with		Not enough places to be active as a family		Hard to find right type of coaching or instruction	
	Strongly agree	Agree	Strongly agree	Agree	Strongly agree	Agree
TOTAL, ADULTS (18+)	22%	15%	21%	11%	17%	12%
women	26	15	23	10	19	13
men	17	15	18	11	15	11
18–24	19	15	19	–	18	14
women	23	16	21	–	18	15
men	15	14	17	–	18	–
25–44	24	14	23	12	17	10
women	28	14	27	11	18	11
men	20	14	19	13	15	9
45–64	18	17	15	10	17	12
women	21	17	16	7	19	13
men	15	17	15	13	14	11
65+	27	14	26	–	18	16
women	32	16	–	–	21	20
men	18	–	–	–	–	–
REGION						
East	24	15	30	12	23	15
Newfoundland	25	16	34	–	29	–
Prince Edward Island	27	17	26	–	21	15
Nova Scotia	24	15	27	–	20	15
New Brunswick	24	15	31	12	22	16
Quebec	23	13	21	–	21	11
Ontario	22	15	20	12	17	12
West	20	16	18	10	13	12
Manitoba	21	15	20	–	13	14
Saskatchewan	17	17	19	–	18	13
Alberta	19	16	19	–	12	13
British Columbia	21	17	–	–	–	–
North	17	12	25	12	16	14
Northwest Territories	23	–	26	12	21	11
Yukon	–	–	24	–	–	15
ENERGY EXPENDITURE						
Active (≥ 3 KKD ¹)	20	13	22	9	16	12
Moderately active (1.5–2.9 KKD)	23	14	20	11	16	11
Somewhat active (0.5–1.4 KKD)	23	14	20	11	18	10
Sedentary (<0.5 KKD)	25	24	19	15	20	17

1 Kilo-calories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Adults' barriers to becoming more active (cont'd)

1999 Physical Activity Monitor

	Hard to find other people to be active with		Not enough places to be active as a family		Hard to find right type of coaching or instruction	
	Strongly agree	Agree	Strongly agree	Agree	Strongly agree	Agree
EDUCATION LEVEL						
Less than secondary	27%	18%	25%	13%	25%	13%
Secondary	23	16	22	9	18	12
College	25	12	22	15	17	14
University	15	15	17	7	13	10
HOUSEHOLD INCOME						
< \$20,000	30	15	34	7	25	14
\$20,000–29,999	28	13	20	11	24	11
\$30,000–39,999	24	15	25	13	15	16
\$40,000–59,999	20	17	18	11	17	10
\$60,000–79,999	15	15	16	10	11	9
\$80,000–99,999	18	12	16	–	–	–
\$100,000	14	13	15	–	13	–
EMPLOYMENT STATUS						
Full-time worker	19	15	18	10	13	11
Part-time worker	24	13	24	12	22	10
Unemployed	25	25	34	–	33	–
Homemaker	28	11	29	–	20	13
Student	24	17	19	–	23	12
Retired	26	12	23	–	19	13
COMMUNITY SIZE						
< 1,000	27	19	31	10	26	11
1,000–9,999	24	12	27	11	24	12
10,000–74,999	17	17	16	10	13	11
75,000–299,999	17	17	13	11	12	15
300,000	22	13	20	10	13	10
FAMILY COMPOSITION						
Living with a partner	20	16	21	11	16	12
with children at home	22	15	24	11	17	10
without children at home	19	16	17	12	16	14
Widowed, divorced, separated	28	14	22	11	17	14
with children at home	18	–	24	–	13	–
without children at home	30	15	21	–	18	13
Never married	23	14	20	7	19	11
with children at home	23	–	37	–	–	–
without children at home	23	13	17	6	20	10

– Data unavailable because of insufficient sample size.

Adults' barriers to becoming more active (cont'd)

1999 Physical Activity Monitor

	Concerns about safety keep from walking or bicycling		Too much traffic in area for walking or bicycling		Too much crime on the streets for safe walking or bicycling	
	Strongly agree	Agree	Strongly agree	Agree	Strongly agree	Agree
TOTAL, ADULTS (18+)	15%	8%	34%	16%	20%	11%
women	21	10	37	15	20	11
men	10	7	30	17	20	12
18–24	11	12	31	–	–	–
women	19	18	–	–	–	–
men	–	–	–	–	–	–
25–44	15	8	36	16	19	10
women	20	8	38	16	18	10
men	11	7	34	16	20	–
45–64	14	7	30	20	18	13
women	19	8	35	17	18	11
men	10	6	23	24	20	–
65+	23	10	39	15	33	–
women	30	–	41	–	39	–
men	–	–	35	–	–	–
REGION						
East	20	11	39	21	19	6
Newfoundland	17	–	40	–	–	–
Prince Edward Island	17	–	30	–	–	–
Nova Scotia	22	–	42	–	–	–
New Brunswick	21	10	37	20	17	–
Quebec	13	–	37	–	–	–
Ontario	16	9	38	16	24	12
West	15	9	27	15	19	14
Manitoba	15	11	25	–	–	–
Saskatchewan	12	–	–	–	–	–
Alberta	12	–	–	–	–	–
British Columbia	17	–	31	–	–	–
North	11	6	28	14	19	–
Northwest Territories	14	–	–	–	–	–
Yukon	–	–	–	–	–	–
ENERGY EXPENDITURE						
Active (3 KKD ¹)	14	7	34	14	17	10
Moderately active (1.5–2.9 KKD)	15	7	33	15	21	12
Somewhat active (0.5–1.4 KKD)	17	10	37	15	25	12
Sedentary (<0.5 KKD)	18	12	34	22	22	–

1 Kilo-calories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Adults' barriers to becoming more active (cont'd)

1999 Physical Activity Monitor

	Concerns about safety keep from walking or bicycling		Too much traffic in area for walking or bicycling		Too much crime on the streets for safe walking or bicycling	
	Strongly agree	Agree	Strongly agree	Agree	Strongly agree	Agree
EDUCATION LEVEL						
Less than secondary	24%	12%	42%	18%	29%	15%
Secondary	15	10	36	17	23	11
College	14	6	34	15	20	11
University	12	7	29	14	12	9
HOUSEHOLD INCOME						
< \$20,000	25	9	39	13	26	12
\$20,000–29,999	18	10	30	18	15	18
\$30,000–39,999	16	8	36	17	17	–
\$40,000–59,999	13	9	39	14	26	–
\$60,000–79,999	7	–	35	–	–	–
\$80,000–99,999	–	–	–	–	–	–
\$100,000	–	–	–	–	–	–
EMPLOYMENT STATUS						
Full-time worker	13	8	34	15	19	10
Part-time worker	16	8	39	17	24	–
Unemployed	16	–	–	–	–	–
Homemaker	28	–	38	–	22	–
Student	14	–	–	–	–	–
Retired	21	10	34	16	29	14
COMMUNITY SIZE						
< 1,000	19	9	50	12	21	–
1,000–9,999	15	7	40	15	16	12
10,000–74,999	12	7	27	17	18	12
75,000–299,999	13	9	29	14	13	–
300,000	15	9	32	16	25	14
FAMILY COMPOSITION						
Living with a partner	15	7	35	17	20	11
with children at home	15	8	37	17	19	10
without children at home	15	6	34	17	22	11
Widowed, divorced, separated	21	9	34	16	26	12
with children at home	23	–	39	–	–	–
without children at home	20	7	33	15	28	15
Never married	13	11	32	14	17	12
with children at home	19	–	–	–	–	–
without children at home	13	12	30	15	17	13

– Data unavailable because of insufficient sample size.

Adults' barriers to becoming more active (cont'd)

1999 Physical Activity Monitor

	Badly maintained sidewalks and bicycle lanes keep from bicycling		Poorly lit sidewalks and streets keep from walking or bicycling	
	Strongly agree	Agree	Strongly agree	Agree
TOTAL, ADULTS (18+)	24%	10%	27%	12%
women	25	11	29	13
men	23	8	23	11
18–24	16	–	26	–
women	–	–	32	–
men	–	–	–	–
25–44	25	9	26	11
women	27	9	29	11
men	21	8	22	11
45–64	24	10	24	13
women	22	12	23	14
men	27	–	26	–
65+	32	13	33	13
women	30	–	35	–
men	–	–	–	–
REGION				
East	32	13	34	14
Newfoundland	–	–	31	–
Prince Edward Island	–	–	–	–
Nova Scotia	40	–	43	–
New Brunswick	30	14	28	17
Quebec	–	–	–	–
Ontario	23	10	28	10
West	23	13	25	14
Manitoba	20	–	24	–
Saskatchewan	–	–	–	–
Alberta	–	–	–	–
British Columbia	–	–	–	–
North	31	–	24	19
Northwest Territories	36	–	–	–
Yukon	–	–	–	–
ENERGY EXPENDITURE				
Active (≥ 3 KKD ¹)	24	9	25	10
Moderately active (1.5–2.9 KKD)	24	8	29	14
Somewhat active (0.5–1.4 KKD)	24	13	26	10
Sedentary (<0.5 KKD)	27	–	29	18

¹ Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Adults' barriers to becoming more active (cont'd)

1999 Physical Activity Monitor

	Badly maintained sidewalks and bicycle lanes keep from bicycling		Poorly lit sidewalks and streets keep from walking or bicycling	
	Strongly agree	Agree	Strongly agree	Agree
EDUCATION LEVEL				
Less than secondary	35%	10%	34%	13%
Secondary	27	11	27	12
College	19	11	28	13
University	18	8	22	11
HOUSEHOLD INCOME				
< \$20,000	32	8	34	12
\$20,000–29,999	20	12	27	13
\$30,000–39,999	23	–	27	–
\$40,000–59,999	26	–	23	14
\$60,000–79,999	–	–	–	–
\$80,000–99,999	–	–	–	–
\$100,000	–	–	–	–
EMPLOYMENT STATUS				
Full-time worker	21	9	24	13
Part-time worker	25	–	24	–
Unemployed	–	–	–	–
Homemaker	28	–	35	–
Student	–	–	–	–
Retired	35	11	35	11
COMMUNITY SIZE				
< 1,000	39	–	39	–
1,000–9,999	29	15	31	14
10,000–74,999	24	8	28	10
75,000–299,999	14	–	13	–
300,000	20	10	25	14
FAMILY COMPOSITION				
Living with a partner	26	10	27	13
with children at home	24	9	27	15
without children at home	28	10	27	11
Widowed, divorced, separated	25	11	29	12
with children at home	–	–	–	–
without children at home	25	–	26	13
Never married	20	9	26	11
with children at home	–	–	–	–
without children at home	17	9	25	10

– Data unavailable because of insufficient sample size.

Adults' barriers to becoming more active (cont'd)

1999 Physical Activity Monitor

	Trails and parks not well maintained		Sport and recreation facilities not well maintained	
	Strongly agree	Agree	Strongly agree	Agree
TOTAL, ADULTS (18+)	12%	8%	11%	8%
women	12	7	12	8
men	12	9	11	8
18–24	9	7	7	10
women	–	–	–	14
men	–	–	–	–
25–44	11	8	10	8
women	10	6	11	7
men	12	10	9	9
45–64	13	7	13	6
women	12	6	13	7
men	13	–	13	5
65+	21	12	19	9
women	25	–	21	–
men	–	–	17	–
REGION				
East	18	6	18	10
Newfoundland	21	–	19	–
Prince Edward Island	20	–	16	–
Nova Scotia	17	–	18	–
New Brunswick	17	–	18	11
Quebec	12	–	11	10
Ontario	14	9	12	8
West	10	6	11	6
Manitoba	15	–	15	12
Saskatchewan	–	–	13	–
Alberta	–	–	–	–
British Columbia	–	–	–	–
North	13	8	12	9
Northwest Territories	13	–	15	10
Yukon	–	–	–	–
ENERGY EXPENDITURE				
Active (≥ 3 KKD ¹)	11	8	10	8
Moderately active (1.5–2.9 KKD)	12	4	13	6
Somewhat active (0.5–1.4 KKD)	14	8	11	6
Sedentary (<0.5 KKD)	15	15	14	15

¹ Kilojoules/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Adults' barriers to becoming more active (cont'd)

1999 Physical Activity Monitor

	Trails and parks not well maintained		Sport and recreation facilities not well maintained	
	Strongly agree	Agree	Strongly agree	Agree
EDUCATION LEVEL				
Less than secondary	22%	10%	20%	11%
Secondary	13	10	14	11
College	12	7	8	6
University	8	6	7	5
HOUSEHOLD INCOME				
< \$20,000	19	12	16	10
\$20,000–29,999	14	8	15	11
\$30,000–39,999	9	–	12	8
\$40,000–59,999	13	9	14	5
\$60,000–79,999	8	–	7	–
\$80,000–99,999	–	–	–	–
\$100,000	–	–	–	–
EMPLOYMENT STATUS				
Full-time worker	10	7	9	8
Part-time worker	14	–	15	6
Unemployed	16	–	13	–
Homemaker	20	–	19	–
Student	–	–	–	–
Retired	20	11	17	9
COMMUNITY SIZE				
< 1,000	18	–	18	9
1,000–9,999	16	8	17	9
10,000–74,999	11	8	9	9
75,000–299,999	9	8	6	6
300,000	10	6	9	6
FAMILY COMPOSITION				
Living with a partner	12	8	12	7
with children at home	12	8	12	8
without children at home	12	8	12	7
Widowed, divorced, separated	19	8	14	7
with children at home	–	–	–	–
without children at home	19	9	14	7
Never married	10	7	9	10
with children at home	–	–	–	–
without children at home	10	6	9	9

– Data unavailable because of insufficient sample size.

Children's barriers to becoming more active

1999 Physical Activity Monitor

	Lack of skill		Lack of information	
	Strongly agree	Agree	Strongly agree	Agree
TOTAL, PARENTS (18+)	13%	8%	20%	11%
mothers	13	9	22	11
fathers	14	7	18	12
25-44	12	9	20	12
mothers	12	9	19	12
fathers	12	–	21	12
45-64	20	–	18	–
mothers	–	–	27	–
fathers	–	–	–	–
CHILDREN (5-17)				
girls	18	10	21	9
boys	10	7	20	12
5-12	11	10	15	11
girls	16	11	18	–
boys	6	–	13	13
13-17	18	6	24	10
girls	20	–	22	10
boys	16	–	26	11
REGION				
East	14	13	29	14
Newfoundland	–	–	35	–
Prince Edward Island	–	–	–	–
Nova Scotia	–	–	–	–
New Brunswick	–	–	25	–
Quebec	–	–	–	–
Ontario	14	–	18	11
West	14	–	21	11
Manitoba	–	–	–	–
Saskatchewan	–	–	–	–
Alberta	–	–	–	–
British Columbia	–	–	–	–
North	–	–	–	15
Northwest Territories	–	–	–	–
Yukon	–	–	–	–

– Data unavailable because of insufficient sample size.

Children's barriers to becoming more active (cont'd)

1999 Physical Activity Monitor

	Lack of skill		Lack of information	
	Strongly agree	Agree	Strongly agree	Agree
PARENT'S ENERGY EXPENDITURE¹				
Active (3 KKD ²)	12%	—	20%	12%
Moderately active (1.5–2.9 KKD)	11	8	20	11
Somewhat active (0.5–1.4 KKD)	—	—	21	9
Sedentary (<0.5 KKD)	—	—	23	—
PARENT'S EDUCATION LEVEL				
Less than secondary	14	—	33	—
Secondary	16	—	16	12
College	—	—	21	13
University	—	—	19	9
HOUSEHOLD INCOME				
< \$20,000	—	—	43	—
\$20,000–29,999	—	—	26	—
\$30,000–39,999	—	—	26	—
\$40,000–59,999	—	—	19	10
\$60,000–79,999	—	—	—	—
\$80,000–99,999	—	—	—	—
\$100,000	—	—	—	—
PARENT'S EMPLOYMENT STATUS				
Full-time worker	14	7	18	11
Part-time worker	—	—	24	11
Unemployed	—	—	55	—
Homemaker	—	—	21	—
Student	—	—	—	—
Retired	—	—	—	—
COMMUNITY SIZE				
< 1,000	—	—	42	—
1,000–9,999	13	—	25	14
10,000–74,999	10	—	14	11
75,000–299,999	—	—	14	—
300,000	—	—	18	—
PARENT'S MARITAL STATUS				
Living with a partner	13	8	20	11
Widowed, divorced, separated	—	—	26	—
Never married	—	—	29	—

1 Parent who answered on behalf of the child.

2 Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

— Data unavailable because of insufficient sample size.

Children's barriers to becoming more active (cont'd)

1999 Physical Activity Monitor

	Hours and time not suitable		Too hard to get to places to be active	
	Strongly agree	Agree	Strongly agree	Agree
TOTAL, PARENTS (18+)	16%	9%	19%	9%
mothers	19	9	23	10
fathers	12	8	14	8
25-44	16	9	19	9
mothers	18	9	22	10
fathers	14	—	14	—
45-64	16	—	17	—
mothers	—	—	—	—
fathers	—	—	—	—
CHILDREN (5-17)				
girls	19	9	19	7
boys	14	9	20	11
5-12	15	10	20	7
girls	17	13	17	—
boys	14	8	23	—
13-17	17	7	19	12
girls	21	—	17	—
boys	13	—	20	—
REGION				
East	18	13	18	11
Newfoundland	—	—	—	—
Prince Edward Island	—	—	—	—
Nova Scotia	—	—	—	—
New Brunswick	—	—	20	—
Quebec	—	—	—	—
Ontario	15	—	22	—
West	18	—	16	—
Manitoba	—	—	—	—
Saskatchewan	—	—	—	—
Alberta	—	—	—	—
British Columbia	—	—	—	—
North	—	—	—	—
Northwest Territories	—	—	—	—
Yukon	—	—	—	—

— Data unavailable because of insufficient sample size.

Children's barriers to becoming more active (cont'd)

1999 Physical Activity Monitor

	Hours and time not suitable		Too hard to get to places to be active	
	Strongly agree	Agree	Strongly agree	Agree
PARENT'S ENERGY EXPENDITURE ¹				
Active (3 KKD ²)	16%	–	15%	7%
Moderately active (1.5–2.9 KKD)	15	10	18	8
Somewhat active (0.5–1.4 KKD)	15	–	21	–
Sedentary (<0.5 KKD)	–	–	30	–
PARENT'S EDUCATION LEVEL				
Less than secondary	18	16	30	–
Secondary	14	–	20	12
College	16	–	17	–
University	18	–	16	–
HOUSEHOLD INCOME				
< \$20,000	–	–	28	–
\$20,000–29,999	–	–	27	–
\$30,000–39,999	–	–	34	–
\$40,000–59,999	–	–	18	–
\$60,000–79,999	–	–	–	–
\$80,000–99,999	–	–	–	–
\$100,000	–	–	–	–
PARENT'S EMPLOYMENT STATUS				
Full-time worker	15	8	17	11
Part-time worker	19	–	21	–
Unemployed	–	–	–	–
Homemaker	–	–	19	–
Student	–	–	–	–
Retired	–	–	–	–
COMMUNITY SIZE				
< 1,000	–	–	39	–
1,000–9,999	18	5	21	16
10,000–74,999	14	9	12	–
75,000–299,999	–	–	–	–
300,000	–	–	–	–
PARENT'S MARITAL STATUS				
Living with a partner	14	8	19	10
Widowed, divorced, separated	22	–	21	–
Never married	–	–	–	–

¹ Parent who answered on behalf of the child.

² Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Children's barriers to becoming more active (cont'd)

1999 Physical Activity Monitor

	Not enough programs, services, facilities in the community		Programs, facilities not the right type	
	Strongly agree	Agree	Strongly agree	Agree
TOTAL, PARENTS (18+)	22%	12%	18%	11%
mothers	24	12	21	11
fathers	20	11	14	12
25-44	21	12	17	11
mothers	22	13	20	11
fathers	20	12	14	10
45-64	23	–	20	–
mothers	24	–	25	–
fathers	–	–	–	–
CHILDREN (5-17)				
girls	22	10	17	11
boys	23	14	19	11
5-12	19	10	15	8
girls	22	–	14	–
boys	17	10	15	–
13-17	27	14	22	14
girls	24	–	22	13
boys	30	18	21	–
REGION				
East	35	13	23	16
Newfoundland	40	–	–	–
Prince Edward Island	–	–	–	–
Nova Scotia	36	–	–	–
New Brunswick	28	–	21	–
Quebec	–	–	–	–
Ontario	17	13	15	–
West	23	12	16	10
Manitoba	–	–	–	–
Saskatchewan	–	–	–	–
Alberta	–	–	–	–
British Columbia	–	–	–	–
North	20	–	12	–
Northwest Territories	–	–	–	–
Yukon	–	–	–	–

– Data unavailable because of insufficient sample size.

Children's barriers to becoming more active (cont'd)

1999 Physical Activity Monitor

	Not enough programs, services, facilities in the community		Programs, facilities not the right type	
	Strongly agree	Agree	Strongly agree	Agree
PARENT'S ENERGY EXPENDITURE ¹				
Active (≥ 3 KKD ²)	24%	12%	17%	10%
Moderately active (1.5–2.9 KKD)	20	11	17	12
Somewhat active (0.5–1.4 KKD)	20	11	20	–
Sedentary (<0.5 KKD)	29	–	–	–
PARENT'S EDUCATION LEVEL				
Less than secondary	43	–	27	–
Secondary	19	11	15	10
College	24	10	20	9
University	16	18	16	13
HOUSEHOLD INCOME				
< \$20,000	37	–	34	–
\$20,000–29,999	31	–	20	–
\$30,000–39,999	25	–	23	–
\$40,000–59,999	22	10	18	10
\$60,000–79,999	–	–	–	–
\$80,000–99,999	–	–	–	–
\$100,000	–	–	–	–
PARENT'S EMPLOYMENT STATUS				
Full-time worker	20	13	16	11
Part-time worker	22	–	17	–
Unemployed	52	–	–	–
Homemaker	22	–	20	–
Student	–	–	–	–
Retired	–	–	–	–
COMMUNITY SIZE				
< 1,000	50	–	20	–
1,000–9,999	29	13	25	17
10,000–74,999	19	10	17	6
75,000–299,999	–	–	–	–
300,000	–	–	–	–
PARENT'S MARITAL STATUS				
Living with a partner	21	12	18	10
Widowed, divorced, separated	29	–	22	–
Never married	27	–	–	–

¹ Parent who answered on behalf of the child.

² Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Children's barriers to becoming more active (cont'd)

1999 Physical Activity Monitor

	Dollar costs of child's physical activity are too high		Safety concerns keep child from walking and bicycling	
	Strongly agree	Agree	Strongly agree	Agree
TOTAL, PARENTS (18+)	26%	12%	13%	6%
mothers	32	13	15	6
fathers	17	11	11	—
25–44	27	12	13	7
mothers	35	11	14	7
fathers	16	13	—	—
45–64	18	—	14	—
mothers	17	—	—	—
fathers	—	—	—	—
CHILDREN (5–17)				
girls	25	11	14	7
boys	26	13	13	—
5–12	25	12	16	6
girls	26	8	15	9
boys	25	17	16	—
13–17	27	11	10	—
girls	24	—	—	—
boys	29	9	—	—
REGION				
East	29	15	17	10
Newfoundland	—	—	—	—
Prince Edward Island	—	—	—	—
Nova Scotia	37	—	—	—
New Brunswick	26	—	—	—
Quebec	—	—	—	—
Ontario	25	11	19	—
West	22	14	—	—
Manitoba	—	—	—	—
Saskatchewan	—	—	—	—
Alberta	—	—	—	—
British Columbia	—	—	—	—
North	25	—	—	—
Northwest Territories	—	—	—	—
Yukon	—	—	—	—

— Data unavailable because of insufficient sample size.

Children's barriers to becoming more active (cont'd)

1999 Physical Activity Monitor

	Dollar costs of child's physical activity are too high		Safety concerns keep child from walking and bicycling	
	Strongly agree	Agree	Strongly agree	Agree
PARENT'S ENERGY EXPENDITURE ¹				
Active (≥ 3 KKD ²)	24%	12%	8%	—
Moderately active (1.5–2.9 KKD)	25	14	15	—
Somewhat active (0.5–1.4 KKD)	24	8	—	—
Sedentary (<0.5 KKD)	35	—	—	—
PARENT'S EDUCATION LEVEL				
Less than secondary	33	15	14	—
Secondary	27	12	14	—
College	26	11	14	—
University	22	11	—	—
HOUSEHOLD INCOME				
< \$20,000	53	—	—	—
\$20,000–29,999	31	22	—	—
\$30,000–39,999	31	—	—	—
\$40,000–59,999	25	11	—	—
\$60,000–79,999	—	—	—	—
\$80,000–99,999	—	—	—	—
\$100,000	—	—	—	—
PARENT'S EMPLOYMENT STATUS				
Full-time worker	24	11	12	5
Part-time worker	32	—	—	—
Unemployed	61	—	—	—
Homemaker	27	—	—	—
Student	—	—	—	—
Retired	—	—	—	—
COMMUNITY SIZE				
< 1,000	17	—	—	—
1,000–9,999	33	10	13	—
10,000–74,999	23	10	—	—
75,000–299,999	18	—	—	—
300,000	24	—	—	—
PARENT'S MARITAL STATUS				
Living with a partner	24	12	13	6
Widowed, divorced, separated	30	—	—	—
Never married	43	—	—	—

¹ Parent who answered on behalf of the child.

² Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

— Data unavailable because of insufficient sample size.

Children's barriers to becoming more active (cont'd)

1999 Physical Activity Monitor

	Not enough places to be active as a family		Hard to find right type of instruction or coaching		Hard to find other children to be active with	
	Strongly agree	Agree	Strongly agree	Agree	Strongly agree	Agree
TOTAL, PARENTS (18+)	23%	9%	17%	10%	15%	7%
mothers	24	11	19	10	16	7
fathers	23	7	14	9	14	7
25-44	24	9	16	9	15	6
mothers	24	11	18	9	16	6
fathers	24	7	14	10	15	6
45-64	19	–	18	10	13	–
mothers	–	–	–	–	–	–
fathers	–	–	–	–	–	–
CHILDREN (5-17)						
girls	21	10	17	10	15	8
boys	26	8	18	9	16	7
5-12	23	11	14	9	13	8
girls	18	14	14	11	10	–
boys	28	8	14	8	15	–
13-17	23	7	21	10	16	7
girls	21	–	20	10	–	–
boys	24	–	22	–	17	–
REGION						
East	30	16	21	17	17	10
Newfoundland	36	–	–	–	–	–
Prince Edward Island	–	–	–	–	–	–
Nova Scotia	–	–	–	–	–	–
New Brunswick	25	–	–	–	–	–
Quebec	35	–	–	–	–	–
Ontario	18	–	15	–	16	–
West	19	10	17	–	16	7
Manitoba	–	–	–	–	–	–
Saskatchewan	–	–	–	–	–	–
Alberta	–	–	–	–	–	–
British Columbia	–	–	–	–	–	–
North	13	–	–	–	–	–
Northwest Territories	–	–	–	–	–	–
Yukon	–	–	–	–	–	–

– Data unavailable because of insufficient sample size.

Children's barriers to becoming more active (cont'd)

1999 Physical Activity Monitor

	Not enough places to be active as a family		Hard to find right type of instruction or coaching		Hard to find other children to be active with	
	Strongly agree	Agree	Strongly agree	Agree	Strongly agree	Agree
PARENT'S ENERGY EXPENDITURE ¹						
Active (≥ 3 KKD ²)	18%	9%	14%	9%	14%	7%
Moderately active (1.5–2.9 KKD)	22	8	16	10	12	9
Somewhat active (0.5–1.4 KKD)	25	12	18	–	18	–
Sedentary (<0.5 KKD)	38	–	–	–	–	–
PARENT'S EDUCATION LEVEL						
Less than secondary	36	12	30	–	21	–
Secondary	22	8	16	7	15	9
College	26	9	17	8	15	–
University	17	9	14	13	14	9
HOUSEHOLD INCOME						
< \$20,000	36	–	44	–	33	–
\$20,000–29,999	33	–	23	–	17	–
\$30,000–39,999	36	–	–	–	–	–
\$40,000–59,999	21	9	16	–	14	–
\$60,000–79,999	–	–	–	–	–	–
\$80,000–99,999	–	–	–	–	–	–
\$100,000	–	–	–	–	–	–
PARENT'S EMPLOYMENT STATUS						
Full-time worker	22	9	14	10	13	8
Part-time worker	22	–	–	–	–	–
Unemployed	–	–	–	–	–	–
Homemaker	27	–	–	–	22	–
Student	–	–	–	–	–	–
Retired	–	–	–	–	–	–
COMMUNITY SIZE						
< 1,000	31	–	35	–	20	–
1,000–9,999	32	5	19	10	12	8
10,000–74,999	17	9	12	–	15	–
75,000–299,999	15	–	–	–	–	–
300,000	21	–	–	–	–	–
PARENT'S MARITAL STATUS						
Living with a partner	23	9	16	10	14	7
Widowed, divorced, separated	19	–	26	–	–	–
Never married	42	–	–	–	–	–

¹ Parent who answered on behalf of the child.

² Kilojoules/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Helping adults to become more active

1999 Physical Activity Monitor

	Provide incentives		Provide rewards	
	Strongly agree	Agree	Strongly agree	Agree
TOTAL, ADULTS (18+)	20%	11%	17%	9%
women	23	11	18	11
men	16	10	16	8
18–24	24	16	18	13
women	26	19	15	14
men	22	12	20	12
25–44	20	11	20	10
women	24	12	21	12
men	16	11	18	7
45–64	16	8	13	8
women	18	9	14	9
men	13	8	11	7
65+	22	6	17	7
women	27	–	19	–
men	–	–	15	–
REGION				
East	21	14	18	13
Newfoundland	24	–	22	–
Prince Edward Island	21	14	16	15
Nova Scotia	19	13	14	12
New Brunswick	21	15	19	15
Quebec	26	9	21	9
Ontario	17	12	16	10
West	18	9	16	8
Manitoba	12	–	12	–
Saskatchewan	19	–	16	13
Alberta	18	–	15	–
British Columbia	20	–	17	–
North	15	10	14	8
Northwest Territories	16	11	16	–
Yukon	14	–	13	–
ENERGY EXPENDITURE				
Active (3 KKD ¹)	23	11	20	10
Moderately active (1.5–2.9 KKD)	16	12	13	9
Somewhat active (0.5–1.4 KKD)	20	8	20	10
Sedentary (<0.5 KKD)	19	10	14	10

1 Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Helping adults to become more active (cont'd)

1999 Physical Activity Monitor

	Provide incentives		Provide rewards	
	Strongly agree	Agree	Strongly agree	Agree
EDUCATION LEVEL				
Less than secondary	29%	12%	27%	11%
Secondary	22	11	19	11
College	18	10	13	10
University	15	10	14	8
HOUSEHOLD INCOME				
< \$20,000	30	13	25	14
\$20,000–29,999	27	10	23	10
\$30,000–39,999	19	12	15	12
\$40,000–59,999	20	11	19	11
\$60,000–79,999	11	10	11	–
\$80,000–99,999	17	–	–	–
\$100,000	13	–	13	–
EMPLOYMENT STATUS				
Full-time worker	17	10	15	9
Part-time worker	26	12	26	11
Unemployed	28	–	23	–
Homemaker	27	13	20	–
Student	26	15	19	11
Retired	21	7	15	6
COMMUNITY SIZE				
< 1,000	15	12	12	7
1,000–9,999	25	9	24	8
10,000–74,999	16	10	13	10
75,000–299,999	19	10	14	12
300,000	18	12	16	9
FAMILY COMPOSITION				
Living with a partner	18	9	17	9
with children at home	19	11	19	9
without children at home	17	8	16	8
Widowed, divorced, separated	27	10	20	9
with children at home	33	–	24	–
without children at home	26	10	19	9
Never married	22	14	17	11
with children at home	26	–	21	–
without children at home	21	14	17	11

– Data unavailable because of insufficient sample size.

Helping adults to become more active (cont'd)

1999 Physical Activity Monitor

	Subsidize fitness or health memberships at work		Drop or reduce user fees		Provide affordable instruction or coaching	
	Strongly agree	Agree	Strongly agree	Agree	Strongly agree	Agree
TOTAL, ADULTS (18+)	49%	14%	38%	12%	28%	15%
women	53	14	43	13	33	18
men	45	14	33	11	23	13
18–24	59	16	53	14	35	21
women	69	16	60	15	44	23
men	49	16	45	13	26	19
25–44	55	11	41	11	30	16
women	57	11	47	12	34	19
men	52	11	35	11	25	12
45–64	36	18	30	12	24	14
women	39	19	33	15	30	17
men	33	17	27	8	19	11
65+	31	–	27	10	22	10
women	37	–	28	–	25	–
men	25	–	25	–	19	–
REGION						
East	51	14	42	15	31	16
Newfoundland	52	16	40	15	30	18
Prince Edward Island	52	16	39	14	26	–
Nova Scotia	54	–	43	15	32	15
New Brunswick	48	14	42	15	32	17
Quebec	42	16	37	9	30	16
Ontario	52	13	39	13	29	13
West	50	14	38	11	27	18
Manitoba	47	14	33	13	25	16
Saskatchewan	52	–	35	–	24	18
Alberta	49	15	36	12	25	17
British Columbia	51	14	42	–	30	19
North	42	13	38	13	27	18
Northwest Territories	39	11	35	15	28	19
Yukon	44	15	39	–	26	17
ENERGY EXPENDITURE						
Active (≥ 3 KKD ¹)	57	12	43	11	33	18
Moderately active (1.5–2.9 KKD)	47	14	38	13	28	13
Somewhat active (0.5–1.4 KKD)	47	17	35	11	25	16
Sedentary (<0.5 KKD)	33	14	34	11	24	11

1 Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Helping adults to become more active (cont'd)

1999 Physical Activity Monitor

	Subsidize fitness or health memberships at work		Drop or reduce user fees		Provide affordable instruction or coaching	
	Strongly agree	Agree	Strongly agree	Agree	Strongly agree	Agree
EDUCATION LEVEL						
Less than secondary	46%	16%	44%	11%	31%	11%
Secondary	48	13	36	12	30	16
College	52	12	40	12	28	14
University	49	15	37	11	26	18
HOUSEHOLD INCOME						
< \$20,000	53	13	53	11	39	13
\$20,000–29,999	46	15	42	13	29	15
\$30,000–39,999	45	17	35	13	28	16
\$40,000–59,999	56	11	38	13	31	18
\$60,000–79,999	44	18	32	13	19	15
\$80,000–99,999	48	14	34	–	28	15
\$100,000	48	10	28	9	25	17
EMPLOYMENT STATUS						
Full-time worker	49	14	36	11	26	15
Part-time worker	53	11	44	15	37	21
Unemployed	55	–	58	–	44	13
Homemaker	44	16	42	16	28	17
Student	64	15	54	12	41	19
Retired	34	16	32	9	23	11
COMMUNITY SIZE						
< 1,000	34	11	32	10	19	19
1,000–9,999	46	13	41	12	32	17
10,000–74,999	45	17	35	10	25	14
75,000–299,999	57	14	38	14	28	14
300,000	52	12	36	12	28	15
FAMILY COMPOSITION						
Living with a partner	46	14	35	12	26	15
with children at home	51	11	39	12	29	16
without children at home	41	16	33	11	24	14
Widowed, divorced, separated	50	13	40	9	31	12
with children at home	66	–	45	–	35	18
without children at home	44	14	39	7	30	10
Never married	56	14	45	12	33	18
with children at home	47	–	44	–	46	–
without children at home	58	11	45	11	31	18

– Data unavailable because of insufficient sample size.

Helping adults to become more active (cont'd)

1999 Physical Activity Monitor

	Provide information via a toll-free number		Provide information via the media or Internet	
	Strongly agree	Agree	Strongly agree	Agree
TOTAL, ADULTS (18+)	33%	14%	17%	13%
women	37	15	18	12
men	29	14	16	13
18–24	35	18	17	19
women	43	11	21	18
men	27	25	13	19
25–44	38	16	18	12
women	40	19	18	12
men	35	13	18	12
45–64	26	12	14	12
women	32	12	17	11
men	20	11	10	13
65+	25	9	20	9
women	27	–	20	–
men	23	–	20	–
REGION				
East	34	15	19	15
Newfoundland	31	18	23	17
Prince Edward Island	32	12	17	15
Nova Scotia	34	15	16	17
New Brunswick	37	13	19	13
Quebec	33	14	18	12
Ontario	35	13	18	14
West	30	16	14	11
Manitoba	30	11	15	12
Saskatchewan	28	12	12	14
Alberta	26	21	14	10
British Columbia	34	14	15	–
North	28	15	16	14
Northwest Territories	27	12	13	14
Yukon	29	17	18	15
ENERGY EXPENDITURE				
Active (≥ 3 KKD ¹)	36	15	19	14
Moderately active (1.5–2.9 KKD)	34	13	16	13
Somewhat active (0.5–1.4 KKD)	31	15	17	15
Sedentary (<0.5 KKD)	26	12	15	6

1 Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Helping adults to become more active (cont'd)

1999 Physical Activity Monitor

	Provide information via a toll-free number		Provide information via the media or Internet	
	Strongly agree	Agree	Strongly agree	Agree
EDUCATION LEVEL				
Less than secondary	37%	10%	24%	11%
Secondary	35	13	18	12
College	32	15	16	14
University	29	17	14	13
HOUSEHOLD INCOME				
< \$20,000	46	10	27	13
\$20,000–29,999	34	14	17	15
\$30,000–39,999	35	14	20	10
\$40,000–59,999	33	17	17	15
\$60,000–79,999	23	18	11	14
\$80,000–99,999	32	15	–	15
\$100,000	26	14	12	13
EMPLOYMENT STATUS				
Full-time worker	31	15	15	13
Part-time worker	41	15	18	16
Unemployed	38	–	20	15
Homemaker	41	12	22	11
Student	37	15	20	12
Retired	27	9	19	11
COMMUNITY SIZE				
< 1,000	28	13	14	15
1,000–9,999	35	14	19	13
10,000–74,999	30	15	16	14
75,000–299,999	29	14	14	12
300,000	33	15	17	12
FAMILY COMPOSITION				
Living with a partner	32	13	16	12
with children at home	37	15	16	12
without children at home	28	12	16	12
Widowed, divorced, separated	34	14	19	13
with children at home	40	–	23	–
without children at home	32	14	18	15
Never married	35	17	19	14
with children at home	41	–	17	–
without children at home	35	17	19	14

– Data unavailable because of insufficient sample size.

Helping adults to become more active (cont'd)

1999 Physical Activity Monitor

	Provide a wide variety of activities		Provide more opportunities to try activities	
	Strongly agree	Agree	Strongly agree	Agree
TOTAL, ADULTS (18+)	34%	17%	27%	18%
women	37	18	30	20
men	30	16	24	15
18–24	43	19	37	21
women	52	17	43	21
men	34	21	32	21
25–44	36	19	28	20
women	36	22	28	26
men	36	16	28	14
45–64	28	15	22	15
women	32	16	27	15
men	23	14	18	14
65+	25	10	23	11
women	30	9	29	–
men	17	–	–	–
REGION				
East	39	19	33	17
Newfoundland	44	21	36	20
Prince Edward Island	33	20	29	18
Nova Scotia	37	18	33	16
New Brunswick	38	19	32	18
Quebec	34	15	26	19
Ontario	33	19	27	18
West	32	15	27	16
Manitoba	29	21	22	20
Saskatchewan	27	22	25	17
Alberta	32	13	27	16
British Columbia	35	14	28	15
North	33	18	26	21
Northwest Territories	36	21	28	17
Yukon	31	16	26	23
ENERGY EXPENDITURE				
Active (≥ 3 KKD ¹)	38	18	31	17
Moderately active (1.5–2.9 KKD)	34	17	25	18
Somewhat active (0.5–1.4 KKD)	30	17	25	20
Sedentary (<0.5 KKD)	24	12	24	12

1 Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Helping adults to become more active (cont'd)

1999 Physical Activity Monitor

	Provide a wide variety of activities		Provide more opportunities to try activities	
	Strongly agree	Agree	Strongly agree	Agree
EDUCATION LEVEL				
Less than secondary	35%	17%	32%	15%
Secondary	35	13	28	17
College	34	17	29	18
University	31	20	24	19
HOUSEHOLD INCOME				
< \$20,000	43	15	39	15
\$20,000–29,999	33	17	28	19
\$30,000–39,999	36	16	25	19
\$40,000–59,999	35	19	30	19
\$60,000–79,999	25	22	20	19
\$80,000–99,999	33	15	22	21
\$100,000	33	18	25	16
EMPLOYMENT STATUS				
Full-time worker	32	18	25	18
Part-time worker	42	19	34	21
Unemployed	41	14	35	20
Homemaker	36	20	29	22
Student	42	23	41	22
Retired	26	11	23	11
COMMUNITY SIZE				
< 1,000	31	20	28	19
1,000–9,999	38	15	30	20
10,000–74,999	30	18	26	15
75,000–299,999	32	19	24	19
300,000	33	17	26	15
FAMILY COMPOSITION				
Living with a partner	32	17	25	17
with children at home	36	17	26	18
without children at home	30	17	24	16
Widowed, divorced, separated	31	17	29	15
with children at home	38	19	29	14
without children at home	29	17	28	16
Never married	38	17	33	19
with children at home	38	15	44	–
without children at home	38	17	32	21

– Data unavailable because of insufficient sample size.

Helping adults to become more active (cont'd)

1999 Physical Activity Monitor

	Provide outreach programs		Provide services that link people up		Provide more family-oriented programs	
	Strongly agree	Agree	Strongly agree	Agree	Strongly agree	Agree
TOTAL, ADULTS (18+)	31%	16%	28%	18%	29%	13%
women	38	17	31	19	33	13
men	25	15	25	17	25	12
18–24	37	20	35	20	22	13
women	45	25	39	19	29	15
men	29	15	30	20	15	11
25–44	33	18	27	20	36	15
women	39	18	28	20	42	15
men	27	17	25	20	31	14
45–64	27	14	27	16	24	12
women	34	15	32	20	25	12
men	20	14	22	12	23	12
65+	27	11	26	12	22	7
women	31	12	30	12	23	–
men	23	–	21	–	21	–
REGION						
East	34	18	31	20	36	13
Newfoundland	40	18	32	23	44	14
Prince Edward Island	33	28	31	20	37	–
Nova Scotia	32	15	28	19	33	–
New Brunswick	33	22	33	19	34	15
Quebec	37	15	30	17	35	11
Ontario	32	15	27	16	27	16
West	26	18	26	19	27	11
Manitoba	24	17	25	15	28	10
Saskatchewan	27	17	29	21	28	13
Alberta	22	19	26	16	31	13
British Columbia	29	18	26	21	23	–
North	24	15	25	17	31	13
Northwest Territories	27	17	26	17	30	14
Yukon	22	14	25	17	31	–
ENERGY EXPENDITURE						
Active (≥ 3 KKD ¹)	33	15	30	16	30	13
Moderately active (1.5–2.9 KKD)	32	18	27	19	28	13
Somewhat active (0.5–1.4 KKD)	32	17	29	20	33	13
Sedentary (<0.5 KKD)	25	13	22	15	25	11

1 Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Helping adults to become more active (cont'd)

1999 Physical Activity Monitor

	Provide outreach programs		Provide services that link people up		Provide more family-oriented programs	
	Strongly agree	Agree	Strongly agree	Agree	Strongly agree	Agree
EDUCATION LEVEL						
Less than secondary	38%	17%	36%	15%	36%	12%
Secondary	31	16	30	18	33	11
College	32	18	27	19	30	13
University	28	15	22	18	22	15
HOUSEHOLD INCOME						
< \$20,000	46	16	40	18	39	11
\$20,000–29,999	35	18	33	19	31	11
\$30,000–39,999	27	21	25	20	33	13
\$40,000–59,999	33	20	25	23	35	16
\$60,000–79,999	22	11	21	13	20	9
\$80,000–99,999	24	13	25	18	21	16
\$100,000	29	12	24	16	22	16
EMPLOYMENT STATUS						
Full-time worker	30	16	25	19	28	13
Part-time worker	38	17	36	16	31	16
Unemployed	35	22	35	17	39	10
Homemaker	38	17	34	21	46	–
Student	34	25	33	18	24	17
Retired	28	12	27	13	24	7
COMMUNITY SIZE						
< 1,000	26	15	29	20	30	14
1,000–9,999	35	17	34	18	34	15
10,000–74,999	27	17	23	18	28	13
75,000–299,999	28	20	23	20	26	11
300,000	32	13	25	17	25	11
FAMILY COMPOSITION						
Living with a partner	30	15	26	18	33	13
with children at home	31	18	25	19	45	14
without children at home	29	13	27	17	24	12
Widowed, divorced, separated	36	14	35	16	31	12
with children at home	34	23	33	26	52	–
without children at home	36	11	36	13	24	12
Never married	34	20	30	18	19	13
with children at home	41	–	43	20	37	–
without children at home	33	21	28	17	17	13

– Data unavailable because of insufficient sample size.

Helping adults to become more active (cont'd)

1999 Physical Activity Monitor

	Maintain a well-linked network of trails and paths		Provide supportive facilities, such as showers, bike racks, lockers		Provide ski racks, bike carriers on public transit	
	Strongly agree	Agree	Strongly agree	Agree	Strongly agree	Agree
TOTAL, ADULTS (18+)	43%	16%	28%	13%	17%	10%
women	46	18	28	14	18	11
men	39	15	27	11	16	9
18–24	46	17	26	17	24	13
women	55	23	26	20	26	15
men	38	11	26	15	23	–
25–44	43	19	33	14	19	10
women	46	19	35	15	18	11
men	40	19	32	13	19	9
45–64	42	13	22	11	11	9
women	43	16	23	15	14	9
men	40	10	22	6	8	10
65+	39	11	19	6	19	8
women	39	10	20	–	21	–
men	38	–	18	–	–	–
REGION						
East	50	16	28	15	15	10
Newfoundland	51	17	32	18	16	13
Prince Edward Island	43	18	28	14	14	–
Nova Scotia	50	–	26	–	13	–
New Brunswick	49	19	28	16	16	11
Quebec	40	15	32	11	20	14
Ontario	43	16	28	12	17	9
West	42	17	23	15	17	8
Manitoba	37	18	22	13	13	–
Saskatchewan	41	15	32	12	16	–
Alberta	44	14	20	17	16	–
British Columbia	43	20	22	15	19	–
North	42	14	30	13	19	8
Northwest Territories	41	13	28	13	10	–
Yukon	43	15	31	13	24	–
ENERGY EXPENDITURE						
Active (≥ 3 KKD ¹)	51	15	32	15	21	11
Moderately active (1.5–2.9 KKD)	39	19	24	14	15	9
Somewhat active (0.5–1.4 KKD)	39	17	29	10	17	7
Sedentary (<0.5 KKD)	31	12	18	9	14	11

1 Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Helping adults to become more active (cont'd)

1999 Physical Activity Monitor

	Maintain a well-linked network of trails and paths		Provide supportive facilities, such as showers, bike racks, lockers		Provide ski racks, bike carriers on public transit	
	Strongly agree	Agree	Strongly agree	Agree	Strongly agree	Agree
EDUCATION LEVEL						
Less than secondary	41%	17%	32%	11%	22%	12%
Secondary	41	16	27	13	17	11
College	42	17	26	12	15	9
University	45	15	27	15	17	9
HOUSEHOLD INCOME						
< \$20,000	49	13	37	13	29	15
\$20,000–29,999	37	18	26	14	20	12
\$30,000–39,999	37	17	28	14	14	14
\$40,000–59,999	44	19	29	16	14	9
\$60,000–79,999	38	20	21	10	13	–
\$80,000–99,999	48	12	26	13	–	–
\$100,000	45	13	26	11	17	–
EMPLOYMENT STATUS						
Full-time worker	41	17	28	13	16	9
Part-time worker	51	14	33	19	21	13
Unemployed	47	–	40	–	28	–
Homemaker	46	18	32	12	23	–
Student	44	18	26	15	22	12
Retired	42	12	21	7	14	8
COMMUNITY SIZE						
< 1,000	43	14	22	13	12	7
1,000–9,999	46	12	30	12	18	9
10,000–74,999	41	18	21	14	15	10
75,000–299,999	39	19	28	12	16	10
300,000	43	15	29	12	19	10
FAMILY COMPOSITION						
Living with a partner	43	16	26	12	15	9
with children at home	45	17	30	13	15	8
without children at home	41	15	23	11	14	10
Widowed, divorced, separated	39	15	31	11	20	9
with children at home	39	21	45	12	23	–
without children at home	39	13	26	11	19	8
Never married	43	17	30	16	24	13
with children at home	35	–	31	20	35	–
without children at home	44	16	30	15	22	12

– Data unavailable because of insufficient sample size.

Helping children to become more active

1999 Physical Activity Monitor

	Provide incentives		Provide rewards	
	Strongly agree	Agree	Strongly agree	Agree
TOTAL, PARENTS (18+)	33%	16%	31%	12%
mothers	37	16	35	13
fathers	26	16	26	10
25–44	34	17	33	12
mothers	39	16	34	14
fathers	27	19	30	10
45–64	25	11	23	10
mothers	32	–	32	–
fathers	–	–	–	–
CHILDREN (5–17)				
girls	32	17	30	13
boys	33	15	32	11
5–12	36	18	36	14
girls	37	17	37	13
boys	35	20	36	15
13–17	30	14	28	10
girls	27	–	23	–
boys	32	–	32	–
REGION				
East	37	17	33	18
Newfoundland	40	–	41	–
Prince Edward Island	40	–	35	–
Nova Scotia	37	–	–	–
New Brunswick	31	22	32	20
Quebec	–	–	–	–
Ontario	36	15	33	11
West	31	16	33	12
Manitoba	34	–	–	–
Saskatchewan	41	–	41	–
Alberta	–	–	–	–
British Columbia	–	–	–	–
North	31	–	36	–
Northwest Territories	34	–	38	–
Yukon	–	–	34	–

– Data unavailable because of insufficient sample size.

Helping children to become more active (cont'd)

1999 Physical Activity Monitor

	Provide incentives		Provide rewards	
	Strongly agree	Agree	Strongly agree	Agree
PARENT'S ENERGY EXPENDITURE¹				
Active (3 KKD ²)	36%	17%	33%	14%
Moderately active (1.5–2.9 KKD)	26	19	30	12
Somewhat active (0.5–1.4 KKD)	34	14	30	9
Sedentary (<0.5 KKD)	36	–	33	–
PARENT'S EDUCATION LEVEL				
Less than secondary	43	11	49	6
Secondary	30	18	28	11
College	29	18	27	14
University	35	13	30	13
HOUSEHOLD INCOME				
< \$20,000	57	–	54	–
\$20,000–29,999	33	–	32	–
\$30,000–39,999	40	–	28	–
\$40,000–59,999	30	18	34	11
\$60,000–79,999	20	–	22	–
\$80,000–99,999	29	–	18	–
\$100,000	29	–	28	–
PARENT'S EMPLOYMENT STATUS				
Full-time worker	30	15	27	12
Part-time worker	43	15	43	–
Unemployed	55	–	46	–
Homemaker	30	–	28	–
Student	–	–	–	–
Retired	–	–	–	–
COMMUNITY SIZE				
< 1,000	28	22	31	–
1,000–9,999	34	17	33	11
10,000–74,999	23	14	23	15
75,000–299,999	35	–	31	–
300,000	37	–	32	–
PARENT'S MARITAL STATUS				
Living with a partner	31	16	30	12
Widowed, divorced, separated	39	–	44	–
Never married	49	–	34	–

1 Parent who answered on behalf of the child.

2 Kilojoules/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Helping children to become more active (cont'd)

1999 Physical Activity Monitor

	Subsidize health or fitness club memberships		Drop or reduce user fees		Provide affordable instruction or coaching	
	Strongly agree	Agree	Strongly agree	Agree	Strongly agree	Agree
TOTAL, PARENTS (18+)	39%	11%	35%	13%	37%	14%
mothers	43	12	39	15	40	15
fathers	35	9	29	11	32	14
25-44	42	13	37	14	39	16
mothers	43	13	41	14	40	15
fathers	39	13	31	14	36	16
45-64	30	–	26	–	29	10
mothers	37	–	29	–	36	–
fathers	24	–	24	–	–	–
CHILDREN (5-17)						
girls	36	12	33	15	34	16
boys	42	11	37	12	39	12
5-12	37	13	33	17	37	14
girls	33	13	31	19	35	15
boys	41	14	35	15	39	12
13-17	42	9	39	8	36	14
girls	39	–	37	–	32	17
boys	45	8	41	8	40	12
REGION						
East	39	15	38	14	37	20
Newfoundland	43	–	37	–	36	–
Prince Edward Island	51	–	45	–	–	–
Nova Scotia	–	–	41	–	36	–
New Brunswick	35	–	33	–	39	24
Quebec	–	–	–	–	–	–
Ontario	42	–	36	16	37	15
West	38	14	37	15	38	18
Manitoba	–	–	38	–	–	–
Saskatchewan	50	–	–	–	–	–
Alberta	–	–	–	–	–	–
British Columbia	–	–	42	–	–	–
North	33	–	34	–	34	23
Northwest Territories	39	–	35	–	37	–
Yukon	–	–	34	–	–	–

– Data unavailable because of insufficient sample size.

Helping children to become more active (cont'd)

1999 Physical Activity Monitor

	Subsidize health or fitness club memberships		Drop or reduce user fees		Provide affordable instruction or coaching	
	Strongly agree	Agree	Strongly agree	Agree	Strongly agree	Agree
PARENT'S ENERGY EXPENDITURE¹						
Active (3 KKD ²)	41%	12%	37%	11%	41%	15%
Moderately active (1.5–2.9 KKD)	37	12	33	13	32	17
Somewhat active (0.5–1.4 KKD)	39	–	32	16	32	12
Sedentary (<0.5 KKD)	41	–	39	–	41	–
PARENT'S EDUCATION LEVEL						
Less than secondary	54	–	41	–	41	–
Secondary	36	11	35	12	33	14
College	39	11	33	14	40	12
University	37	13	34	16	37	17
HOUSEHOLD INCOME						
< \$20,000	55	–	53	–	61	–
\$20,000–29,999	44	–	39	16	35	–
\$30,000–39,999	48	–	39	19	36	–
\$40,000–59,999	47	9	40	12	43	16
\$60,000–79,999	25	–	22	–	29	–
\$80,000–99,999	–	–	32	–	–	–
\$100,000	–	–	–	–	–	–
PARENT'S EMPLOYMENT STATUS						
Full-time worker	37	12	32	13	34	14
Part-time worker	41	–	44	–	43	–
Unemployed	80	–	69	–	–	–
Homemaker	40	–	33	–	37	–
Student	–	–	–	–	–	–
Retired	–	–	–	–	–	–
COMMUNITY SIZE						
< 1,000	35	–	26	–	38	–
1,000–9,999	39	10	36	13	38	11
10,000–74,999	41	6	30	10	29	16
75,000–299,999	37	–	35	17	36	20
300,000	36	–	36	–	35	–
PARENT'S MARITAL STATUS						
Living with a partner	37	11	34	13	36	13
Widowed, divorced, separated	50	–	37	16	38	25
Never married	58	–	47	–	55	–

1 Parent who answered on behalf of the child.

2 Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Helping children to become more active (cont'd)

1999 Physical Activity Monitor

	Provide information via a toll-free number		Provide information via the media or Internet	
	Strongly agree	Agree	Strongly agree	Agree
TOTAL, PARENTS (18+)	29%	14%	20%	12%
mothers	33	14	22	13
fathers	23	14	19	10
25-44	31	15	21	13
mothers	34	14	22	14
fathers	27	15	21	13
45-64	19	12	16	—
mothers	27	—	—	—
fathers	—	—	—	—
CHILDREN (5-17)				
girls	26	16	19	14
boys	32	12	22	10
5-12	32	13	22	11
girls	29	16	19	12
boys	35	10	25	11
13-17	26	15	23	12
girls	21	19	22	17
boys	30	—	23	—
REGION				
East	29	17	23	15
Newfoundland	—	—	—	—
Prince Edward Island	—	—	—	—
Nova Scotia	—	—	—	—
New Brunswick	33	—	22	—
Quebec	—	—	—	—
Ontario	30	15	22	13
West	30	12	21	13
Manitoba	—	—	—	—
Saskatchewan	—	—	—	—
Alberta	32	—	—	—
British Columbia	—	—	—	—
North	23	17	15	—
Northwest Territories	—	—	—	—
Yukon	—	—	—	—

— Data unavailable because of insufficient sample size.

Helping children to become more active (cont'd)

1999 Physical Activity Monitor

	Provide information via a toll-free number		Provide information via the media or Internet	
	Strongly agree	Agree	Strongly agree	Agree
PARENT'S ENERGY EXPENDITURE¹				
Active (3 KKD ²)	31%	13%	24%	10%
Moderately active (1.5–2.9 KKD)	26	13	15	15
Somewhat active (0.5–1.4 KKD)	29	14	21	12
Sedentary (<0.5 KKD)	33	–	23	–
PARENT'S EDUCATION LEVEL				
Less than secondary	40	11	28	8
Secondary	30	11	22	11
College	29	16	20	16
University	24	16	17	11
HOUSEHOLD INCOME				
< \$20,000	49	–	40	–
\$20,000–29,999	39	–	21	–
\$30,000–39,999	35	–	27	–
\$40,000–59,999	25	19	22	13
\$60,000–79,999	22	–	–	–
\$80,000–99,999	–	–	–	–
\$100,000	–	–	–	–
PARENT'S EMPLOYMENT STATUS				
Full-time worker	27	13	20	11
Part-time worker	29	15	24	15
Unemployed	61	–	–	–
Homemaker	27	–	–	–
Student	–	–	–	–
Retired	–	–	–	–
COMMUNITY SIZE				
< 1,000	28	–	16	–
1,000–9,999	35	13	20	13
10,000–74,999	19	14	17	12
75,000–299,999	27	–	28	–
300,000	31	–	–	17
PARENT'S MARITAL STATUS				
Living with a partner	27	14	19	12
Widowed, divorced, separated	32	–	29	–
Never married	54	–	37	–

1 Parent who answered on behalf of the child.

2 Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Helping children to become more active (cont'd)

1999 Physical Activity Monitor

	Provide a wide variety of activities		Provide daily physical education		Provide more opportunities at school	
	Strongly agree	Agree	Strongly agree	Agree	Strongly agree	Agree
TOTAL, PARENTS (18+)	37%	21%	62%	11%	55%	14%
mothers	41	22	64	12	57	14
fathers	32	19	59	10	52	15
25-44	38	22	65	11	57	15
mothers	41	24	67	12	58	13
fathers	36	20	61	11	54	16
45-64	29	16	53	10	47	13
mothers	38	–	55	–	48	–
fathers	21	–	50	–	45	–
CHILDREN (5-17)						
girls	36	23	59	10	51	14
boys	39	19	65	12	58	15
5-12	40	19	68	12	61	14
girls	38	23	63	10	57	13
boys	41	16	72	13	64	15
13-17	35	19	57	10	47	15
girls	32	19	52	11	43	14
boys	38	19	61	–	50	15
REGION						
East	43	21	59	13	55	14
Newfoundland	47	–	58	–	61	–
Prince Edward Island	40	–	51	–	49	–
Nova Scotia	41	–	61	–	52	–
New Brunswick	40	24	60	–	54	–
Quebec	32	–	49	–	38	–
Ontario	38	23	69	–	62	16
West	39	20	64	12	58	17
Manitoba	40	–	59	–	55	–
Saskatchewan	35	–	57	–	57	–
Alberta	35	–	54	–	46	–
British Columbia	44	–	76	–	70	–
North	41	16	60	14	55	16
Northwest Territories	46	–	57	–	51	–
Yukon	38	–	61	–	57	–

– Data unavailable because of insufficient sample size.

Helping children to become more active (cont'd)

1999 Physical Activity Monitor

	Provide a wide variety of activities		Provide daily physical education		Provide more opportunities at school	
	Strongly agree	Agree	Strongly agree	Agree	Strongly agree	Agree
PARENT'S ENERGY EXPENDITURE¹						
Active (3 KKD ²)	43%	18%	66%	12%	60%	12%
Moderately active (1.5–2.9 KKD)	34	26	63	12	54	16
Somewhat active (0.5–1.4 KKD)	33	21	58	12	50	15
Sedentary (<0.5 KKD)	38	17	57	–	47	–
PARENT'S EDUCATION LEVEL						
Less than secondary	45	21	57	11	57	13
Secondary	37	16	57	12	48	13
College	39	26	64	13	55	17
University	35	22	69	9	60	14
HOUSEHOLD INCOME						
< \$20,000	52	25	66	–	68	–
\$20,000–29,999	43	18	53	–	47	–
\$30,000–39,999	43	22	69	–	61	–
\$40,000–59,999	40	17	65	10	57	13
\$60,000–79,999	28	29	56	–	40	23
\$80,000–99,999	32	–	64	–	51	–
\$100,000	29	–	66	–	60	–
PARENT'S EMPLOYMENT STATUS						
Full-time worker	35	21	62	10	52	15
Part-time worker	46	17	65	–	60	–
Unemployed	67	–	77	–	74	–
Homemaker	39	–	55	–	52	–
Student	–	–	–	–	–	–
Retired	–	–	–	–	–	–
COMMUNITY SIZE						
< 1,000	41	29	57	15	55	–
1,000–9,999	41	20	61	13	57	13
10,000–74,999	32	19	58	11	48	10
75,000–299,999	36	20	71	–	58	–
300,000	36	23	65	–	57	20
PARENT'S MARITAL STATUS						
Living with a partner	37	20	62	11	54	14
Widowed, divorced, separated	42	20	67	–	62	16
Never married	44	–	65	–	62	–

1 Parent who answered on behalf of the child.

2 Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Helping children to become more active (cont'd)

1999 Physical Activity Monitor

	Emphasize participation over winning		Teach respect and fair play	
	Strongly agree	Agree	Strongly agree	Agree
TOTAL, PARENTS (18+)	44%	16%	48%	14%
mothers	47	17	54	13
fathers	39	16	41	16
25-44	46	17	51	14
mothers	49	17	55	12
fathers	41	17	45	18
45-64	35	15	35	14
mothers	38	–	43	–
fathers	32	–	27	–
CHILDREN (5-17)				
girls	43	15	47	13
boys	45	18	49	15
5-12	47	18	51	16
girls	47	16	48	15
boys	47	20	54	17
13-17	39	15	39	12
girls	37	12	39	–
boys	41	17	39	–
REGION				
East	45	22	56	14
Newfoundland	46	–	55	–
Prince Edward Island	48	–	58	–
Nova Scotia	43	–	58	–
New Brunswick	44	19	55	–
Quebec	37	–	36	–
Ontario	48	17	53	14
West	44	19	49	17
Manitoba	43	–	57	–
Saskatchewan	44	–	55	–
Alberta	40	–	41	–
British Columbia	47	–	49	–
North	41	18	50	–
Northwest Territories	42	–	49	–
Yukon	40	–	51	–

– Data unavailable because of insufficient sample size.

Helping children to become more active (cont'd)

1999 Physical Activity Monitor

	Emphasize participation over winning		Teach respect and fair play	
	Strongly agree	Agree	Strongly agree	Agree
PARENT'S ENERGY EXPENDITURE¹				
Active (3 KKD ²)	47%	14%	54%	14%
Moderately active (1.5–2.9 KKD)	44	20	45	15
Somewhat active (0.5–1.4 KKD)	40	16	43	16
Sedentary (<0.5 KKD)	41	15	48	–
PARENT'S EDUCATION LEVEL				
Less than secondary	42	19	58	–
Secondary	40	14	45	11
College	44	15	50	12
University	49	19	45	21
HOUSEHOLD INCOME				
< \$20,000	56	24	61	–
\$20,000–29,999	36	22	55	–
\$30,000–39,999	44	21	53	20
\$40,000–59,999	47	12	49	13
\$60,000–79,999	39	–	40	–
\$80,000–99,999	44	–	36	–
\$100,000	41	–	49	–
PARENT'S EMPLOYMENT STATUS				
Full-time worker	42	14	44	15
Part-time worker	47	20	59	–
Unemployed	66	–	72	–
Homemaker	43	17	52	–
Student	–	–	–	–
Retired	–	–	–	–
COMMUNITY SIZE				
< 1,000	46	18	48	–
1,000–9,999	47	14	54	13
10,000–74,999	37	14	39	11
75,000–299,999	48	–	52	–
300,000	44	21	49	–
PARENT'S MARITAL STATUS				
Living with a partner	43	16	47	14
Widowed, divorced, separated	47	19	54	–
Never married	51	–	58	–

1 Parent who answered on behalf of the child.

2 Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Helping children to become more active (cont'd)

1999 Physical Activity Monitor

	Provide outreach programs		Provide services that link people up		Provide more family-oriented programs	
	Strongly agree	Agree	Strongly agree	Agree	Strongly agree	Agree
TOTAL, PARENTS (18+)	31%	16%	34%	16%	37%	17%
mothers	34	18	36	17	42	16
fathers	28	13	31	15	32	19
25-44	32	17	36	17	41	18
mothers	35	18	37	18	45	17
fathers	29	16	33	16	37	20
45-64	25	9	25	15	19	14
mothers	28	–	25	–	23	–
fathers	23	–	25	–	–	–
CHILDREN (5-17)						
girls	29	19	32	20	38	15
boys	33	14	37	13	38	19
5-12	34	17	37	18	45	16
girls	30	20	33	23	44	13
boys	38	14	40	12	46	19
13-17	30	14	30	15	24	16
girls	30	17	30	15	22	20
boys	31	13	30	14	25	13
REGION						
East	33	20	39	21	42	19
Newfoundland	37	–	43	–	47	–
Prince Edward Island	40	–	40	–	32	–
Nova Scotia	–	–	37	–	41	–
New Brunswick	34	18	38	18	40	20
Quebec	33	–	–	–	35	–
Ontario	32	20	36	13	38	16
West	30	15	35	19	39	18
Manitoba	–	–	35	–	36	–
Saskatchewan	–	–	44	–	41	–
Alberta	–	–	–	–	37	–
British Columbia	–	–	–	–	–	–
North	29	14	32	21	38	16
Northwest Territories	32	–	36	24	44	–
Yukon	–	–	–	–	34	–

– Data unavailable because of insufficient sample size.

Helping children to become more active (cont'd)

1999 Physical Activity Monitor

	Provide outreach programs		Provide services that link people up		Provide more family-oriented programs	
	Strongly agree	Agree	Strongly agree	Agree	Strongly agree	Agree
PARENT'S ENERGY EXPENDITURE¹						
Active (3 KKD ²)	33%	15%	39%	15%	43%	15%
Moderately active (1.5–2.9 KKD)	28	18	28	21	34	18
Somewhat active (0.5–1.4 KKD)	30	17	31	15	36	16
Sedentary (<0.5 KKD)	37	–	43	–	38	23
PARENT'S EDUCATION LEVEL						
Less than secondary	48	14	49	12	51	14
Secondary	29	14	32	13	36	15
College	28	19	34	20	38	18
University	30	17	32	17	33	21
HOUSEHOLD INCOME						
< \$20,000	51	–	55	–	58	–
\$20,000–29,999	37	21	39	–	42	14
\$30,000–39,999	43	18	40	–	46	25
\$40,000–59,999	32	14	36	15	38	18
\$60,000–79,999	18	20	18	19	31	–
\$80,000–99,999	–	–	–	–	35	–
\$100,000	26	–	30	–	23	–
PARENT'S EMPLOYMENT STATUS						
Full-time worker	28	16	32	14	35	16
Part-time worker	40	17	43	19	38	18
Unemployed	62	–	51	–	67	–
Homemaker	31	–	31	26	47	–
Student	–	–	–	–	–	–
Retired	–	–	–	–	–	–
COMMUNITY SIZE						
< 1,000	40	23	29	27	42	22
1,000–9,999	33	16	37	15	45	16
10,000–74,999	25	13	29	19	26	20
75,000–299,999	32	–	37	–	34	–
300,000	29	19	34	–	41	16
PARENT'S MARITAL STATUS						
Living with a partner	30	17	33	16	36	18
Widowed, divorced, separated	38	12	39	18	46	–
Never married	49	–	51	–	52	–

1 Parent who answered on behalf of the child.

2 Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Helping children to become more active (cont'd)

1999 Physical Activity Monitor

	Maintain a well-linked network of trails and paths		Provide supportive facilities: showers, bike racks, lockers		Provide ski racks, bike carriers on public transit	
	Strongly agree	Agree	Strongly agree	Agree	Strongly agree	Agree
TOTAL, PARENTS (18+)	33%	13%	25%	11%	19%	8%
mothers	36	15	28	13	22	9
fathers	30	12	21	8	15	7
25-44	35	14	26	12	19	9
mothers	37	15	29	13	22	10
fathers	33	13	23	10	16	7
45-64	27	11	21	–	18	–
mothers	31	–	–	–	–	–
fathers	24	–	–	–	–	–
CHILDREN (5-17)						
girls	32	13	25	12	17	8
boys	35	14	26	11	21	9
5-12	37	15	25	11	19	8
girls	37	13	26	11	18	9
boys	37	17	24	11	20	–
13-17	32	11	27	12	24	9
girls	30	–	24	14	20	–
boys	33	–	29	10	28	–
REGION						
East	40	12	23	13	16	9
Newfoundland	45	–	–	–	–	–
Prince Edward Island	39	–	–	–	–	–
Nova Scotia	39	–	–	–	–	–
New Brunswick	38	–	–	–	19	–
Quebec	–	–	–	–	–	–
Ontario	37	13	30	–	19	–
West	32	14	21	16	19	–
Manitoba	36	–	–	–	–	–
Saskatchewan	–	–	–	–	–	–
Alberta	34	–	–	–	–	–
British Columbia	–	–	–	–	–	–
North	30	13	20	–	16	–
Northwest Territories	31	–	–	–	–	–
Yukon	–	–	–	–	–	–

– Data unavailable because of insufficient sample size.

Helping children to become more active (cont'd)

1999 Physical Activity Monitor

	Maintain a well-linked network of trails and paths		Provide supportive facilities: showers, bike racks, lockers		Provide ski racks, bike carriers on public transit	
	Strongly agree	Agree	Strongly agree	Agree	Strongly agree	Agree
PARENT'S ENERGY EXPENDITURE¹						
Active (3 KKD ²)	39%	13%	27%	14%	24%	8%
Moderately active (1.5–2.9 KKD)	30	15	22	11	16	7
Somewhat active (0.5–1.4 KKD)	30	13	22	–	13	11
Sedentary (<0.5 KKD)	32	–	31	–	–	–
PARENT'S EDUCATION LEVEL						
Less than secondary	41	–	32	16	20	15
Secondary	30	14	22	11	22	7
College	32	14	27	11	19	7
University	35	13	25	11	15	–
HOUSEHOLD INCOME						
< \$20,000	49	–	53	–	37	–
\$20,000–29,999	25	–	28	–	20	–
\$30,000–39,999	28	–	24	–	21	–
\$40,000–59,999	34	13	28	–	18	12
\$60,000–79,999	32	–	–	–	–	–
\$80,000–99,999	36	–	–	–	–	–
\$100,000	38	–	–	–	–	–
PARENT'S EMPLOYMENT STATUS						
Full-time worker	32	12	22	11	17	8
Part-time worker	37	19	30	–	21	–
Unemployed	46	–	–	–	–	–
Homemaker	33	–	–	–	21	–
Student	–	–	–	–	–	–
Retired	–	–	–	–	–	–
COMMUNITY SIZE						
< 1,000	36	21	27	–	–	–
1,000–9,999	32	16	23	14	18	8
10,000–74,999	31	9	20	7	17	–
75,000–299,999	36	–	–	–	–	–
300,000	34	–	27	–	17	–
PARENT'S MARITAL STATUS						
Living with a partner	33	13	24	11	18	7
Widowed, divorced, separated	37	–	36	–	27	–
Never married	38	–	–	–	–	–

1 Parent who answered on behalf of the child.

2 Kilocalories/kilogram of body weight/day; an energy expenditure of 3 KKD is roughly equivalent to walking one hour every day.

– Data unavailable because of insufficient sample size.

Appendix B. Methodology

The 1999 Physical Activity Monitor is the sixth nationwide survey on physical activity conducted by the Canadian Fitness and Lifestyle Research Institute—after the 1981 Canada Fitness Survey,⁵¹ the 1988 Campbell Survey on Well-Being in Canada,⁵² and the 1995,⁵ 1997,⁶ and 1998² waves of the Physical Activity Monitor. The 1999 survey provides a synopsis of the current situation in Canada and links it to policy and decision-making relative to the design of initiatives to decrease sedentary living, particularly as they relate to the direct and indirect role of the sport and recreation system.

Questionnaire content

The content of the 1999 Physical Activity Monitor was determined by the Institute in consultation with partners: the Fitness/Active Living Unit of Health Canada along with provincial and territorial partners concerned with fitness, active living, leisure, sport, and recreation through the auspices of the Interprovincial Sport and Recreation Council.

In addition to monitoring progress toward achieving the goal of reducing physical inactivity by 10% in Canada by 2003, the 1999 survey was designed to

- provide trend data on physical activity patterns, including energy expenditure, and participation rates in various types of activities for Canadians aged 18 and older;
- provide trend data on physical activity patterns and participation rates in various types of activities for children and youth aged 1 to 17;
- describe the access to information on physical activity in the community, the systemic barriers to physical activity for adults and children, the factors helping Canadians to become more active, and the opportunities to be active in the community.

Data collection

Data were collected in the spring, summer, and fall of 1999 by the Institute for Social Research at York University in Ontario. This institute captured data directly during the interviews using the CATI (computer-assisted telephone interviews) system. Adults aged 18 and older responded to individual interviews related to the above-mentioned topics. Children's data were obtained via parents who, in addition to completing interviews of their own, answered questions about one of their children under 18 who were still living at home.

Survey design

The 1999 sample was selected using random-digit dialing from telephone exchanges used by households. Findings in this report are based on a final country-wide sample of 4,369 Canadians. A sample of roughly 250 adults was selected within each of the provinces and territories, with additional sample in New Brunswick, Ontario, Quebec, Manitoba, and the Northwest Territories. For each selected household, one individual over the age of 18 was selected at random, thus providing a random sample of individuals in Canada. In addition, if that individual was a parent with children under the age of 18

living at home, he or she answered another physical activity questionnaire for one of the children in the household, also selected at random.

The overall response rate obtained in the 1999 Physical Activity Monitor was 58%. In telephone surveys of this type, a response rate of approximately 65% has been typical, with the response rates dropping in recent years. The response rate was highest in the Yukon and lowest in British Columbia. The sample take is shown in Table 1.

Table 1

SAMPLE TAKE BY REGION AND PROVINCE			
	Adults 18+	Children 1–17	Total
Canada	4,369	1,375	5,744
Atlantic	1,310	447	1,757
Newfoundland	253	94	347
Prince Edward Island	254	94	348
Nova Scotia	258	91	349
New Brunswick	545	168	713
Quebec	367	94	461
Ontario	958	274	1,232
West	1,144	336	1,480
Manitoba	346	92	438
Saskatchewan	262	87	349
Alberta	280	88	368
British Columbia	256	69	325
North	590	224	814
Northwest Territories	348	129	477
Yukon	242	95	337

When there is non response, there is the potential for bias if the responses of respondents do not represent those of non respondents. Potential bias was identified by comparing the demographic variables to the latest Census data (1996). Respondents are more likely to be female and to have a university degree, a common occurrence in telephone surveys.⁵³ However, these differences disappear for women and are generally reduced for education in the weighted data used in the analyses.

Data analysis

Sample weights were adjusted to reflect the non-response rates. All numbers have a statistical error associated with them by virtue of the random selection of the sample. The first table in the table section (Appendix A) permits statistical tests of significance between percentages, taking into account sample design, design effect, and sample size. It specifies the difference required between two estimates for statistical significance. Caution should be used in interpreting data based on small cell sizes, particularly for provincial comparisons. According to standard practice, data released in the tables have

been screened to ensure that each statistic is based on a minimum of 30 individuals. Insufficient sample size is denoted by “–”.

Comparability with earlier surveys

The physical activity data from the 1995, 1997, 1998, and 1999 waves of the Physical Activity Monitor are comparable to the data collected in the 1981 Canada Fitness Survey and the 1988 Campbell Survey on Well-Being in Canada. The question used to determine physical activity levels was similar in all surveys, and the survey context—physical activity—was the same. In all six surveys, the objective was introduced as participation in physical activity and its role in the individual’s well-being. In each survey, participation in physical activity was probed by means of a list and respondents had the opportunity to volunteer additional activities. The physical activity question used is an adaptation of the Minnesota Leisure-Time Physical Activity questionnaire, for which test-retest reliability data were published in 1986 by Aaron Folsom and colleagues.⁵⁴

The data collection methods differed for the six surveys. The 1981 and 1988 surveys used self-completed questionnaires administered face to face in households, whereas the 1995, 1997, 1998, and 1999 surveys were telephone surveys. This accounts for the difference in response rates: about 85% in the 1981 and 1988 surveys compared with about 65% or less in the 1995, 1997, 1998, and 1999 surveys. The assumptions used for non-response adjustment should enable comparisons among the six surveys.

Appendix C. Glossary of terms

Activity level: A classification based on energy expenditure in all non-work, non-chore activity. For each leisure-time activity performed in the 12 months leading up to the survey, adult respondents provided an average number of occasions and an average duration on each occasion. This information was used to calculate a total energy expenditure for the year, which was then converted to a daily energy expenditure and classified in one of four categories:

- *Active* represents an average daily energy expenditure of at least 3 kilocalories per kilogram of body weight (KKD) during the previous 12 months. This can also be interpreted as a net increase of 1260 MET minutes of activity per week above the basal level.
- *Moderately active* represents average energy-expenditure values that are greater than 1.5 and less than 3.0 KKD.
- *Somewhat active* corresponds to average energy-expenditure values greater than 0.5 and less than 1.5 KKD.
- *Sedentary* refers to energy-expenditure values equal to or less than 0.5 KKD.

For the sake of illustration, a person whose only physical activity is walking would be categorized as follows: active if he or she walks for a total of one hour every day, moderately active if he or she walks for a total of 30 minutes every day, somewhat active if he or she walks 10 minutes every day, and sedentary if he or she walks less than 10 minutes a day. This report combines the last three categories when it refers to “less active” or “insufficiently active” adults.

Children’s activity level: A classification based on energy expenditure in all activity.

For each leisure-time activity performed by their children in the 12 months leading up to the survey, parents provided an average number of occasions and an average duration on each occasion. This information was used to calculate a total energy expenditure for the year, which was then converted to a daily energy expenditure and classified in one of two categories:

- *Active enough* represents an average daily energy expenditure of at least 8 KKD during the previous 12 months.
- *Not active enough* represents average energy-expenditure values that are less than 8 KKD.

For the sake of illustration, a physical activity level equal to 8 KKD can be achieved by a child doing a half hour of martial arts on top of walking for a total of at least one hour throughout the day.

Community mobilization: Examples of community mobilization include demonstration projects, support of Web sites, and funding for capacity building (i.e., ensuring that there are more players to support physical activity and providing sufficient financial and human resources to make the system supportive of physical activity).

Mixed land use: Community infrastructure that features mixed land use in development (i.e., residential, commercial, etc.). In terms of physical activity, this would enable

residents to access facilities and organizations in their community through active commuting.

Passive interventions: Interventions strategies that do not require active decision making.⁴¹

Public awareness: Public awareness activities can include press releases, public service announcements, educational programs, presentations, printed articles, ministerial briefings, workshops, counselling, inter-departmental or inter-agency meetings.

Self-efficacy: The confidence in one's ability to perform a given activity.

Service providers: All those individuals who provide facilities and opportunities for physical activity, including recreation specialists, school educators, health promotion professionals, etc.

Sport and recreation system: The local sport and recreation system includes all organizations having the mandate to encourage and support physical activity, whether in the form of facilities, programs, services, or other opportunities allowing Canadians to be active in their community. It is linked to the national and provincial systems through policies that reinforce and assist local efforts to provide a supportive physical environment for being active. Readers may consider consulting the National Recreation Statement of the Interprovincial Sport and Recreation Council found on the recreational database at <http://www.lin.ca/lin/resource/html/statemen.htm>.⁵⁵

Social marketing: The major goal of social marketing is to modify a person's behaviour by accentuating the benefits and minimizing the perceived costs. It involves a blend of social psychology and marketing aimed at convincing a person to accept a socially desirable or beneficial behaviour or ideal.

Systemic barriers: Barriers in the system, whether related to policy, access, stereotypical programming, etc.



REFERENCES



References

- ¹ Federal, Provincial and Territorial Fitness and Recreation Committee. (1997). Press release. Ottawa, ON: Health Canada.
- ² Cameron, C., Craig, C.L., Russell, S.J., & Beaulieu, A. (2000). *Increasing physical activity: Creating effective communications*. Ottawa, ON: Canadian Fitness and Lifestyle Research Institute.
- ³ U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Nutrition and Physical Activity. (1999). *Promoting physical activity: A guide for community action*. Champaign, IL: Human Kinetics.
- ⁴ Federal, Provincial and Territorial Fitness and Recreation Committee. (1996). *Physical inactivity: A framework for action*. Ottawa, ON: Health Canada.
- ⁵ Craig, C.L., Russell, S.J., Cameron, C., & Beaulieu, A. (1998). *1997 Physical activity benchmarks report*. Ottawa, ON: Canadian Fitness and Lifestyle Research Institute.
- ⁶ Craig, C.L., Russell, S.J., Cameron, C., & Beaulieu, A. (1999). *Foundation for joint action: Reducing physical inactivity*. Ottawa, ON: Canadian Fitness and Lifestyle Research Institute.
- ⁷ U.S. Department of Health and Human Services. (1996). *Physical activity and health: A report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion.
- ⁸ Health Canada and Canadian Society for Exercise Physiology. (1998). *Canada's Physical Activity Guide to Healthy Active Living* (Cat. No. H39-429/1998-1E). See also www.paguide.com.
- ⁹ Pate, R., Trost, S.G., Mullis, R., Sallis, J.F., Wechsler, H., & Brown, D.R. (2000). Community interventions to promote proper nutrition and physical activity among youth. *Preventive Medicine*, 31, S138–S149.
- ¹⁰ Corbin, C., Pangrazi, R.P., & Welk, G.J. (1994). Toward an understanding of appropriate physical activity levels for youth. *Physical Activity and Fitness Research Digest* (Series 1, No. 8).
- ¹¹ Anderssen, N., & Wold, B. (1992). Parental and peer influences on leisure-time physical activity in young adolescents. *Research Quarterly for Exercise and Sport*, 63 (4), 341–348.
- ¹² Poest, C.A., Williams, J.R., Witt, D.D., & Atwood, M.E. (1989). Physical activity patterns of preschool children. *Early Childhood Research Quarterly*, 4, 367–376.
- ¹³ Bar-Or, O. (1999). *Physical activity and health in children and adolescents*. Prepared for Canadian Society for Exercise Physiology and Health Canada. Unpublished monograph.
- ¹⁴ Centers for Disease Control and Prevention. (1997). Guidelines for school and community programs to promote lifelong physical activity among young people. *Morbidity and Mortality Weekly Report*, 46 (RR-6), 1–36.
- ¹⁵ Statistics Canada. (1999). *Overview of the time use of Canadians in 1998* (Cat. No. 12F0080XIE) [On-line]. Available: <http://www.statcan.ca/english/IPS/Data/12F0080XIE.htm>
- ¹⁶ Statistics Canada. (2000, July 26). Radio Listening, fall 1999. *The Daily* [On-line serial]. Available: <http://www.statcan.ca/Daily/English/000726/d000726a.htm>
- ¹⁷ Statistics Canada. (2000, May 19). Household Internet use, 1999. *The Daily* [On-line serial]. Available: <http://www.statcan.ca/Daily/English/000519/d000519b.htm>
- ¹⁸ Edwards, P. (1990). *A healthy city is an active city: A strategic framework for the promotion of active living at the community or city level. A WHO Europe discussion paper*. Copenhagen: World Health Organization.
- ¹⁹ Canadian Fitness and Lifestyle Research Institute. (1998). Resources and services. *Progress in Prevention*, Bulletin no. 28.

-
- ²⁰ Pucher, J. (1997). Bicycling boom in Germany: A revival engineered by public policy. *Transportation Quarterly*, 51 (4), 31–46.
- ²¹ Moritz, W. (1997). Survey of North American bicycle commuters: Design and aggregate results. *Transportation Research Record*, 1578, 91–101.
- ²² Sallis, J.F., Bauman, A., & Pratt, M. (1998). Environmental and policy interventions to promote physical activity. *American Journal of Preventive Medicine*, 15 (4), 379–397.
- ²³ Go for Green. (Summer 2000). *Pathfinder newsletter* [On-line]. Available: http://www.trailpaq.com/english/07_publications_e/07_publications_e.cfm
- ²⁴ Canadian Fitness and Lifestyle Research Institute. (1996). Location of physical activity. *Progress in Prevention*, Bulletin no. 12.
- ²⁵ Canadian Fitness and Lifestyle Research Institute. (1996). Barriers to physical activity. *Progress in Prevention*, Bulletin no. 4.
- ²⁶ Estabrooks, P.A. (2000). Sustaining exercise participation through group cohesion. *Exercise & Sport Sciences Reviews*, 28 (2), 63–67.
- ²⁷ Wechsler, H., Devereaux, R.S., Davis, M., & Collins, J. (2000). Using the school environment to promote physical activity and healthy eating. *Preventive Medicine*, 31, S121–S137.
- ²⁸ Canadian Fitness and Lifestyle Research Institute. (1996). Parents' beliefs about children's activity. *Progress in Prevention*, Bulletin no. 9.
- ²⁹ Canadian Fitness and Lifestyle Research Institute. (1998). Helping kids to be active. *Progress in Prevention*, Bulletin no. 30.
- ³⁰ Brownson, R.C., Schmid, T.L., King, A.C., Eyster, A.A., Pratt, M., Murayi, T., Mayer, J.P., & Brown, D.R. (1998). Support for policy interventions to increase physical activity in rural Missouri. *American Journal of Health Promotion*, 12 (4), 263–266.
- ³¹ Edwards, P. (2000). *Evidence-based strategies for increasing participation in physical activity in community recreation, fitness and sport* [On-line]. Available: <http://www.lin.ca/lin/resource/html/mm83.htm>
- ³² Schooler, C. (1995). *Physical activity interventions: Evidence and implications* [On-line]. Available: <http://www.lin.ca/lin/resource/html/interven.htm>
- ³³ Go for Green. (2001). *International Walk to School Day (IWSD)* [On-line]. Available: http://www.goforgreen.ca/walktoschool/home_e.html
- ³⁴ Moran, R. (1999, February 15). Evaluation and treatment of childhood obesity. *American Family Physician* [On-line serial], 59 (4). Available: <http://www.aafp.org/afp/990215ap/861.html>
- ³⁵ 3M Coaching Canada. (2001). *General tips* [On-line]. Available: http://www.3m.com/intl/CA/english/about3m/coaching/coaching_tips_general.html#top
- ³⁶ Russell, W.D., Dzewaltowski, D.A., & Ryan, G.J. (1999). The effectiveness of a point-of-decision prompt in deterring sedentary behavior. *American Journal of Health Promotion*, 13 (5), 257–259.
- ³⁷ Bar-Or, O. (2000). Juvenile obesity, physical activity, and lifestyle changes: Cornerstones for prevention and management. *The Physician and Sportsmedicine* [On-line serial], 28 (11). Available: http://www.physsportsmed.com/issues/2000/11_00/bar_or.htm
- ³⁸ Sallis, J.F., Prochaska, J.J., & Taylor, W.C. (2000). A review of correlates of physical activity of children and adolescents. *Medicine and Science in Sports and Exercise*, 32 (5), 963–975.

-
- ³⁹ Centers for Disease Control and Prevention. (2000). *Promoting better health for young people through physical activity and sports: A report to the President from the Secretary of Health and Human Services and the Secretary of Education* [On-line]. Available: <http://www.cdc.gov/nccdphp/dash/presphysactrpt>
- ⁴⁰ Centers for Disease Control and Prevention. (1999). Neighborhood safety and the prevalence of physical inactivity—selected states, 1996. *Morbidity and Mortality Weekly Report*, 48 (7), 143–146.
- ⁴¹ King, A.C., Jeffery, R.W., Fridinger, F., Dusenbury, L., Provence, S., Hedlund, S.A., & Spangler, K. (1995). Environmental and policy approaches to cardiovascular disease prevention through physical activity: Issues and opportunities. *Health Education Quarterly*, 22 (4), 499–511.
- ⁴² Health Canada and Canadian Society for Exercise Physiology. (1999). *Canada's Physical Activity Guide to Healthy Active Living for Older Adults* (Cat. No. H39-429/1999-1E). See also www.paguide.com.
- ⁴³ Statistics Canada. (1998). *Distribution and average income of husband–wife families by number of earners* [On-line]. Available: <http://www.statcan.ca/english/Pgdb/People/Labour/labor02a.htm>
- ⁴⁴ Mayer, J., & Geller, E.S. (1982–83). Motivating energy efficient travel: A community-based intervention for encouraging biking. *Journal of Environmental Systems*, 12 (2), 99–111.
- ⁴⁵ Communications Working Group of the Federal-Provincial/Territorial Advisory Committee on Fitness and Recreation. (2000). *Joint action in communications: A planning framework*. Ottawa, ON: Fitness/Active Living Unit, Health Canada.
- ⁴⁶ Marcus, B.H., Nigg, C.R., Riebe, D., & Forsyth, L.H. (2000). Interactive communication strategies: Implications for population-based physical activity promotion. *American Journal of Preventive Medicine*, 19 (2), 121–126.
- ⁴⁷ National Recreation and Park Association. (Web search: March 28, 2001). *ActiveParks.org* [On-line]. Available: <http://www.activeparks.org>
- ⁴⁸ Ministry of Education and Ministry of Training, Colleges and Universities, Government of Ontario. (1998). *Stepping up! Your guide to Ontario's new standards for high school* [On-line]. Available: <http://www.edu.gov.on.ca/eng/document/brochure/stepup/stepup.html>
- ⁴⁹ McKenzie, T.L., Sallis, J.F., Elder, J.P., Berry, C.C., Hoy, P.L., Nader, P.R., Zive, M.M., & Broyles, S.L. (1997). Physical activity levels and prompts in young children at recess: A two-year study of a bi-ethnic sample. *Research Quarterly for Exercise and Sport*, 68 (3), 195–202.
- ⁵⁰ Sallis, J.F., Patrick, K., Frank, E., Pratt, M., Wechsler, H., & Glauska, D.A. (2000). Interventions in health care settings to promote healthful eating and physical activity in children and adolescents. *Preventive Medicine*, 31, S112–S120.
- ⁵¹ Canadian Fitness and Lifestyle Research Institute. (1983). *Fitness and lifestyle in Canada*. Ottawa, ON: Author.
- ⁵² Stephens, T., & Craig, C.L. (1990). *The well-being of Canadians: Highlights of the 1988 Campbell Survey*. Ottawa, ON: Canadian Fitness and Lifestyle Research Institute.
- ⁵³ Canadian Fitness and Lifestyle Research Institute. (1996). 1995 Survey methodology. *Progress in Prevention*.
- ⁵⁴ Folsom, A.R., Jacobs, D.R., Jr., Caspersen, C.J., Gomez-Marín, O., & Knudsen, J. (1986). *Journal of Chronic Diseases*, 39 (7), 505–511.
- ⁵⁵ Interprovincial Sport and Recreation Council. (1987). *National recreation statement* [On-line]. Available: <http://www.lin.ca/lin/resource/html/statemen.htm>