



**SECTION B: AVAILABILITY OF INFORMATION ON
PHYSICAL ACTIVITY AND SPORT IN THE
COMMUNITY**



Introduction

*Canada's Physical Activity Guide to Healthy Active Living*¹⁹ was released in the fall of 1998 by the Public Health Agency of Canada (formerly Health Canada) and the Canadian Society for Exercise Physiology (CSEP). The original purpose of the initiative was to provide a practical guide (similar to Canada's Food Guide to Healthy Eating) that would: help Canadians determine how much physical activity they needed to achieve health benefits according to their choice of type of activity ranging from vigorous activities like sports to lower intensity activities like walking for exercise. The Guide also provided information to help Canadians understand why physical activity is important for health; choose suitable activities from provided examples; and build physical activity into daily routines in a variety of settings.¹⁹ This section will examine Canadians' awareness of physical activity guidelines in general and more specifically awareness of Canada's Guide.

Media can be used as a "conduit" for transmitting key information to a large audience²⁰ in efforts to raise consciousness.²¹ Consciousness raising involves informing and educating individuals about a health behaviour and its associated costs and benefits, and thus play a role in increasing awareness and knowledge in the target population. Community wide campaigns that espouse a variety of components, including the use of media, informational packages, events, and support are considered strongly recommended.²²

This section will also explore whether Canadians have personally and recently received information about physical activity or sport, how they obtained this data, and whether they believe this information has affected their physical activity behaviour. It will also compare those who report that they participate in sport—either as a player or in some other manner—to the general population when exploring these topics. These data will be examined by socio-demographic and economic information, including the respondent's age, gender, region of residence, community size, income, education, and daily physical activity level, and by type of sports participation, as well as comparing trends over time. The definition of the type of sports is detailed in Section A of this report and includes a coaching and a competition component. For the purposes of these analyses, physical activity covers overall daily activity (energy expenditure) from all domains, including commuting, work, leisure, chores and errands. The definitions of the levels of activity are as follows: *High* represents 3000 metabolic (MET) minutes of activity. This is equivalent to about 2 hours of activity a day and includes activities like walking to the cafeteria at work (not normally included in questionnaires); *moderate* represents 1500 MET-minutes of activity or about one hour of daily activity; *low* is equivalent to 30 minutes of activity on at least 5 days; and *lowest* represents less than 30 minutes of activity on 5 days. Research indicates that individuals amass approximately 5,000 steps through non-purposeful or incidental activity each day, which roughly translates to accumulating sufficient steps throughout the day to be approximately equivalent to one hour of walking a day.²³ *Canada's Physical Activity Guide to Healthy Active Living* for adults recommends that those aged 25–55 years should consciously include achieve 60 minutes of physical activity every day, or 30 minutes for 4 days a week if activity is moderate to vigorous in intensity. such as participating in sport. This purposeful activity can include added chores, active transportation or leisure time physical activity. Adults older than 55 should achieve 30-60 minutes of moderate activity most days of the week. In general, the higher the MET level achieved by an individual, the greater the derived health benefits.

Awareness of guidelines for physical activity

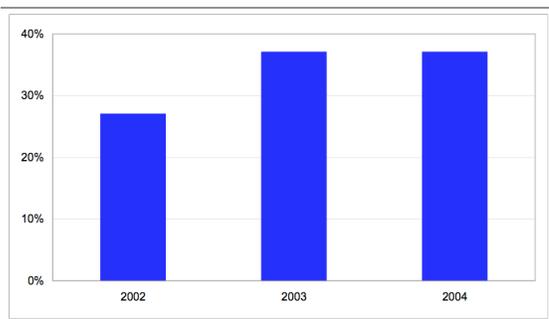
Over half of all Canadians (54%) say that they are aware of some guidelines for physical activity. However, only 37% of adults say that they have heard of Canada's Physical Activity Guide when prompted. In comparison, nearly nine in ten adults indicate that they have heard of Canada's Food Guide. Adults living in Alberta, Yukon, and Ontario are more likely to say that they are aware of some physical activity guidelines, whereas those living in Quebec are the least likely to say this compared to Canadians in general. Residents of Newfoundland are more likely than Canadians overall to report having knowledge of Canada's Physical Activity Guide per se.

The percentages are virtually identical for those indicating that they participate in sport compared to the general population. Given that the proportions observed by province/territory generally followed a similar but non significant pattern to that observed for the general population, one could reasonably hypothesize that the apparent lack of significant differences at the provincial/territorial level may be partially due to the smaller number of sport participants relative to the general population.

Age and sex Overall, women are more likely than men to have heard about some guidelines regarding how much physical activity adults should do. Women are also more likely than men to say that they have heard of specific guidelines like Canada's Food Guide and Canada's Physical Activity Guide when prompted. Similarly among sport participants, women are more likely than men to report that they have heard of any guidelines for physical activity and have heard specifically of Canada's Food Guide. However, the gender differences disappear among those reporting having heard specifically of Canada's Physical Activity Guide.

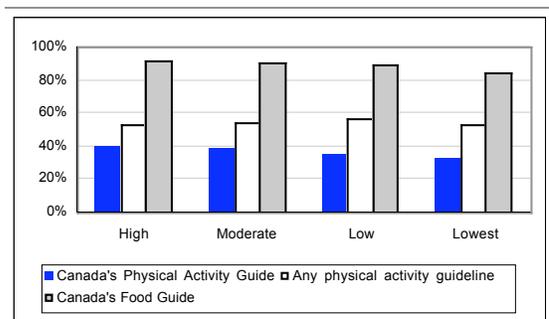
With the exception of older adults (65+), awareness of guidelines for physical activity in the general population becomes more prevalent in people who are older. The same pattern regarding age holds true for sport participants as well.

AWARENESS OF GUIDELINES
trends, adults 2003 – 2004



2003 and 2004 Physical Activity Monitors

AWARENESS OF GUIDELINES
by activity level



2004 Physical Activity Monitor

Awareness of guidelines for physical activity (cont'd)

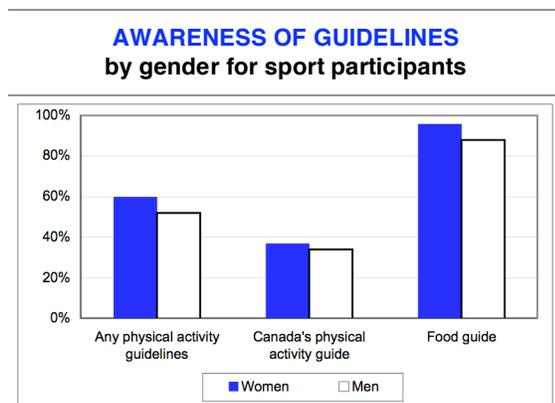
Socio-economic and -demographic factors Parallel to findings for the general population, sport participants with higher levels of education and income are more likely to say that they have heard of or have some knowledge of some physical activity guidelines compared to those with lower education and income. For example, 38% of sport participants with less than secondary education report awareness of any physical activity guidelines compared to 68% of those with a university education. Similarly, 32% of those with household incomes less than \$20,000 report awareness of any physical activity guidelines compared to 71% in the highest income level.

Residents in communities with population sizes greater than 10,000 are more likely than those with smaller populations to have knowledge of some physical activity guidelines. Generally speaking, this relationship is also true among sport participants, with the exception of the smallest communities (<1,000 residents) where awareness is higher.

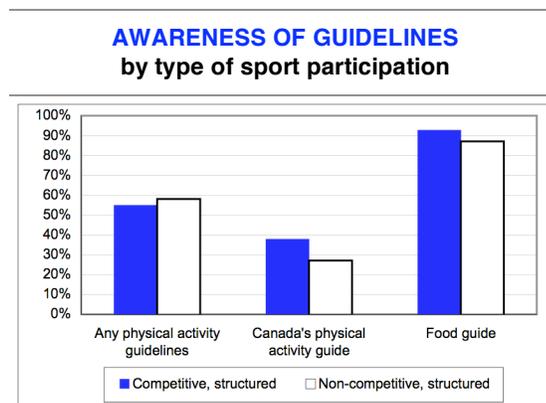
Activity level Although active adults in the general population are more likely than less active adults to say that they have heard of either Canada's Food Guide or Canada's Physical Activity Guide when prompted, there was no difference between those participating in sport or not.

Type of sport participation Interestingly, sport participants who report that they actively play sports are less likely to be aware of Canada's Physical Activity Guide compared to those who participate in some other capacity (i.e. coach, manager, volunteer, etc.). Those who are involved in a competitive and structured sports environment are more likely to be aware of Canada's Physical Activity Guide than those who are in a non-competitive but structured environment.

Trends Prompted awareness of Canada's Physical Activity Guidelines has increased from 2002 but remains unchanged from 2003.³ Moreover, it should be noted that, when Canadians are not specifically prompted with the name of the Guide, Canada's Physical Activity Guide per se is rarely mentioned as an option for guidelines (i.e., less than 5%).³ Trends for sport participants are unavailable as this year's data provides baseline data for regular monitoring of sport participation in Canada.



2004 Physical Activity Monitor, CFLRI



2004 Physical Activity Monitor, CFLRI

Exposure to physical activity and sport information

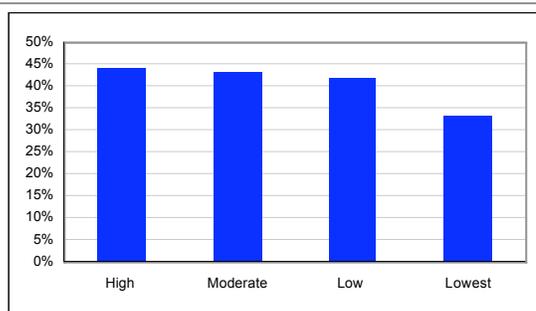
Just over two in five Canadians (41%) say that they have personally received information about physical activity or sport, or that they have spoken to someone about how to become or remain active sometime in the three months prior to participating in the survey. Those who report that they participate in sport are more likely than Canadians in general to report having recently received information about physical activity or sport, or that they have recently spoken to someone about how to become or remain active. Residents of Quebec are more likely to say this compared to Canadians more generally and this is also true among sport participants. For this survey, information may have been received through a variety of modes, including from people, media, books, community programs, by mail, on television, through the internet, and so on.

Age and sex Overall, women are more likely than men to have received physical activity or sport information. This gender difference does not exist among those adults reporting participation in sport. This relationship is most significantly pronounced amongst those aged 25–64. Generally speaking, receiving physical activity and sport information is less likely to be reported by people in older age groups, with adults aged 65 and older being the least likely to report receiving information. This age-related pattern holds true among those reporting participation in sport.

Socio-economic and -demographic factors People with greater levels of education are more likely to say that they have personally received physical activity or sport information or that they have spoken to someone about how to become or remain active sometime during the past 3 months. Among sport participants, individuals with lower education, (i.e. those with secondary education or less) are less likely than those with a college education to report receiving information on physical activity and sport.

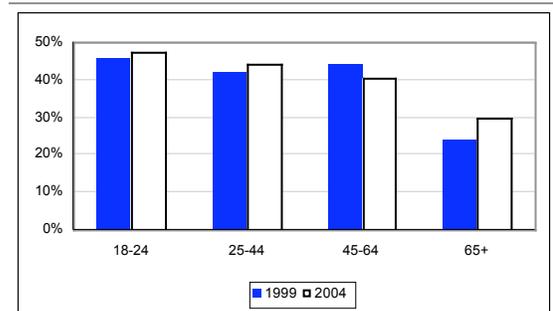
Similarly, people with greater levels of income are more likely to indicate that they have received information about physical activity or sport. Interestingly, the relationship among income that appears at a population level no longer exists among adults who participate in sport.

EXPOSURE TO INFORMATION
by activity level



2004 Physical Activity Monitor

EXPOSURE TO INFORMATION
trends, by age 1999 – 2004



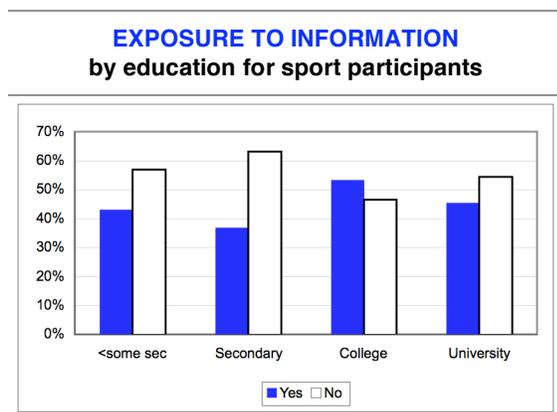
1999 and 2004 Physical Activity Monitors

Exposure to physical activity and sport information (cont'd)

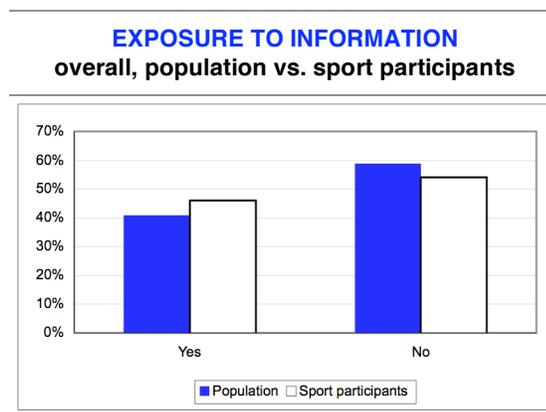
Activity level Canadians who are the least active daily are also the least likely to say that they have personally received any information about physical activity or sport, or that they have spoken to anyone about how to become or remain active sometime in the past three months. Among sport participants, there is no difference in the percentage who received information for adults in varying activity level.

Type of sport participation There are no apparent differences in receiving information on physical activity and sport between adults who play sports and those who participate in other sporting roles or those involve various types of sports participation.

Trends Overall, there is no difference in the proportion of Canadians who state that they have received information on physical activity and sport during the last 3 months compared to 5 years ago. Moreover, the same patterns that appeared in 1999 also appear in the 2004 data: that is, women, younger adults, and active adults are more likely to have received information on physical activity or sport. Trends for sport participants are unavailable as this year's data provides baseline results.



2004 Physical Activity Monitor, CFLRI



2004 Physical Activity Monitor, CFLRI

Source of physical activity and sport information

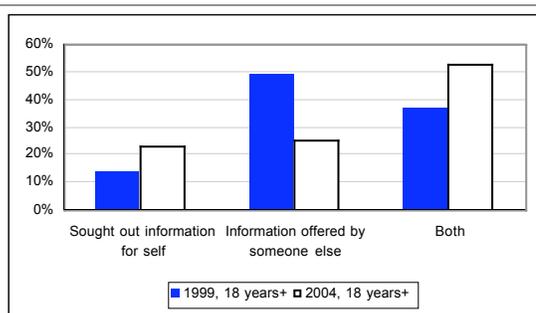
About half of Canadians (53%) received information by *both* seeking the information about physical activity and sport themselves (see topic entitled “Exposure to physical activity and sport information”), and by having it offered to them by others. In addition, 22% received it solely by finding it themselves and 24% had it offered to them. Interestingly, these proportions change considerably among sport participants. Similar proportions appear among sport participants, 52% received information by *both* seeking the information about physical activity and sport themselves *and* by having it offered to them by others. Moreover, 20% of sport participants *solely* receive the information by finding it out themselves and 28% *solely* have the information offered to them. When compared to Canadians more generally, individuals living in the Northwest Territories are more likely to say that they have received this information *both* ways. However, among sport participants, there are no provincial or territorial differences.

Age and sex Overall, women are less likely than men to say that someone offered them information about physical activity or sport. A similar but non-significant gender difference among sport participants in terms of how they receive their information was observed.

With the exception of those younger than 25, being offered this information is more likely to be reported by people in older age groups. Adults, aged 25–44 years, are more likely than adults who are older to say that they have obtained information both ways, that is by seeking it out themselves and by receiving it from someone else. Among sport participants, young adults (age 18–24) are more likely than middle aged adults (aged 45–64) to report obtaining information both ways.

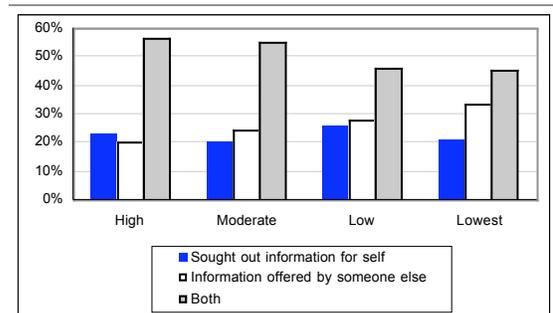
Socio-economic and -demographic factors Canadians with a post secondary school education are more likely than those with higher levels of education to report receiving information about physical activity or sport from others. Those with a university degree however, are more likely than those with less than a secondary school education to say that they sought out this information for themselves. Adults in the lowest income bracket are more likely than those in the highest income bracket to state that someone offered physical activity information to them. Among sport participants, the relationship between education and income is not as apparent.

SOURCE OF INFORMATION
trends, adults 1999 – 2004



1999 and 2004 Physical Activity Monitors

SOURCE OF INFORMATION
by activity level



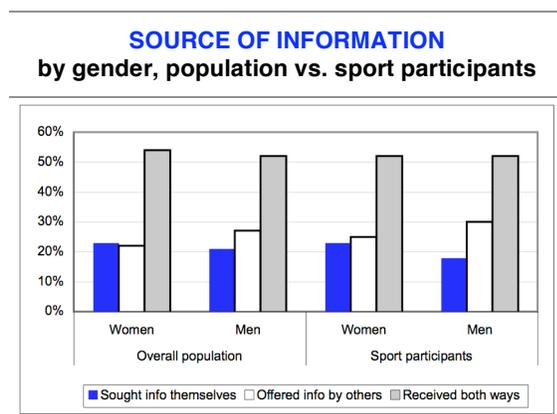
2004 Physical Activity Monitor

Source of physical activity and sport information (cont'd)

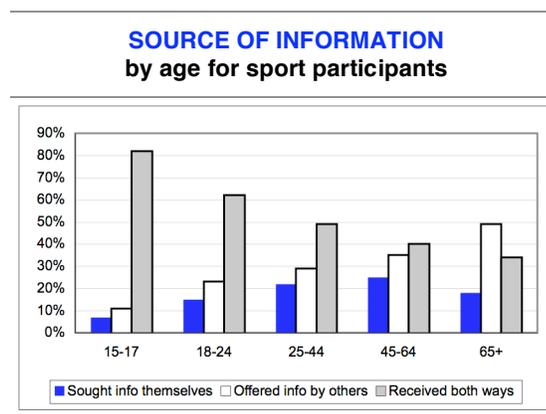
Activity level Inactive Canadians are more likely than those who are moderately or highly active to say that someone offered information to them. A similar relationship also appears among sport participants.

Type of sport participation There are no apparent differences in the method of receiving information on physical activity and sport between adults who play sports and those who participate in other sporting roles. Nor are there any differences between adults who are involved in a competitive and structured sports environment and those who are in a non-competitive environment, regardless of the degree of structure for participation.

Trends How Canadians received information on physical activity and sport has changed significantly over the 5 year period.¹⁷ The proportion of adults who sought the information themselves jumped from 14% in 1999 to 22% in 2004. The proportion of adults who solely had the information offered to them reduced dramatically from 49% (1999) to 24% (2004), and the proportion receiving it both ways increased from 37% in 1999 to 53% in 2004. The pattern that inactive Canadians are more likely to have the information offered to them persists over time. Trend information is not available by participation in sport.



1999 and 2004 Physical Activity Monitors



2004 Physical Activity Monitor

Reported usefulness of the information in increasing activity

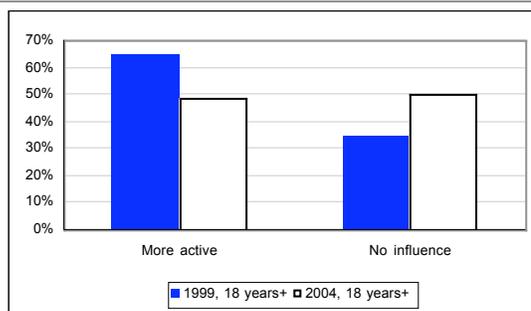
Although half of Canadian adults say that the information they received helped them to become more active, roughly the same proportion (49%) say that it has had no influence at all. Among sport participants, a similar proportion of individuals say that the information helped them to become more active (54%) and 46% reported that the information had no influence on their behaviour at all. For the general population, Newfoundlanders are the most likely to say that the information has helped them to become more active compared to Canadians more generally. Among sport participants, there are no provincial or territorial differences, however, this may be due in part to a lower number of sport participants in the sample which reduces the ability to detect differences.

Age and sex Overall, women are more likely than men to say that the information they received about physical activity has helped them to become more active, and are less likely than men to say that this information has had no influence on them at all. These gender differences do not appear among sport participants.

Generally speaking, people in older age groups are less likely to report that information helps them become more active. These age-differences are similar among sport participants, as middle adults (aged 45–64) are less likely than their younger counterparts to report this.

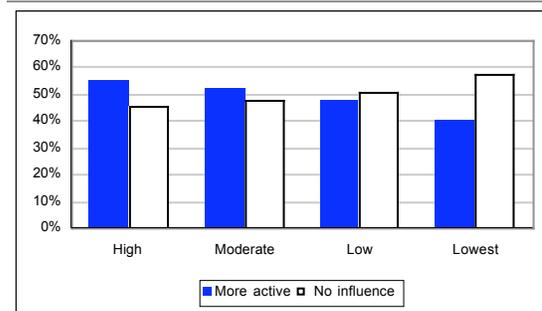
Socio-economic factors University graduates are more likely than those with less than some secondary school education to say that the physical activity information that they have received has had no influence on them whatsoever. In general, Canadians who fall in the lowest income bracket are more likely than those in higher income brackets (\$60,000 per year or more) to say that the information they have obtained about physical activity has helped them to become more active. Among sport participants, there are no statistical differences for education and income on the attribution of the role of the information received on behaviour change.

INFORMATION HELP BECOME MORE ACTIVE
trends, adults (18+), 1999 – 2004



1999 and 2004 Physical Activity Monitors

INFORMATION HELP BECOME MORE ACTIVE
by activity level



2004 Physical Activity Monitor

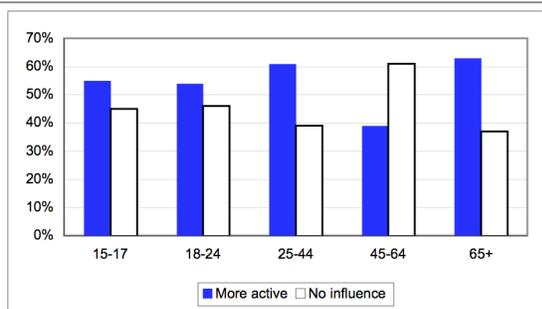
Reported usefulness of the information in increasing activity (cont'd)

Activity level Canadians with the lowest reported level of daily physical activity are less likely than those who are more active to report that this information has helped them become more active and conversely, are more likely than those who are either moderately or highly active to say that this information has not impacted them at all. Although not statistically different, a similar pattern exists among sport participants between activity level and those reporting that the information has helped them become more active.

Type of sport participation Adults who play sports are just as likely as those who participate in other sporting roles to report whether the information has affected their activity behaviour. Similarly, there are no differences between adults who are involved in a competitive and structured sports environment and those who are in a non-competitive environment and structured environment.

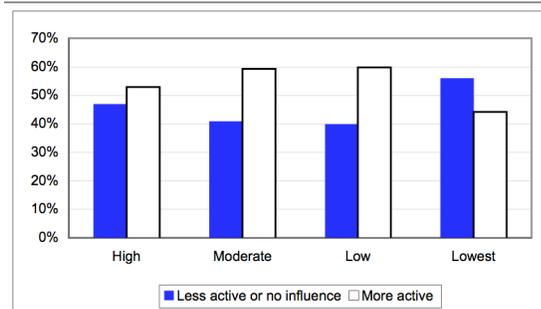
Trends Fewer people in 2004 (50%) than in 1999 (65%) stated that the information that they received on physical activity and sport helped them to become more active²⁴. Although this decrease is apparent across all age groups, it is most notable among older adults (65+) where the proportion has decreased by half from 85% in 1999 to 42% in 2004. Importantly, this segment of the population is also the least active of the population (data not shown). Trend information is not available for sport participants as this was the first year that such information was collected.

INFORMATION AFFECTING ACTIVITY
by age for sport participants



2004 Physical Activity Monitor, CFLRI

INFORMATION AFFECTING ACTIVITY
by activity level for sport participants



2004 Physical Activity Monitor, CFLRI

Summary of section

Less than half of Canadians have either received information about physical activity or sport, or have spoken to someone about how to become or remain active. Generally speaking, the overall findings are very similar to the general population.

Who are less likely to have received information?

- Men
- Adults with lower levels of education
- Adults with the lowest amount of income
- Inactive Canadians
- Adults involved in a non-competitive sports environment (regardless of the degree of structure) compared to those in a competitive and structured sport environment.

Who are more likely to have the information given to them?

- Men
- Older adults
- Low income earners
- Inactive Canadians

Who are more likely to report that the information has helped them become more active?

- Women
- Young adults
- Adults with less than secondary education
- Adults with the lowest level of income
- More active individuals

Who are more likely to report that the information has had no influence on their activity level?

- Men
- Older adults
- Higher income earners
- Inactive Canadians

Discussion, Implications and Recommendations

Informational approaches employed as part of a social marketing campaign of increasing activity may be geared to increasing awareness about physical activity and its associated health benefits and motivating individuals to increase activity levels. These approaches can communicate information on the “what, where, when, why and how” of being active.

Previous national data revealed that two-thirds of Canadians believe that there is a lot of information on physical activity and sports available in their community and that this information is fairly easy to obtain (88% reported that it is easy to some degree).³ However, survey results in this section indicate that only 41% of Canadians have been exposed (or at least paid attention) to this type of information in the past 3 months. Generally speaking, although equally as likely to only have sought out the information themselves or only received it from another individual, roughly half of individuals obtain it *both* ways. Receipt of information on physical activity is similar among the general population and sport participants. For the general population, inactive adults (who are also more likely not to participate in sport) are as likely as others to seek the information out themselves, yet are more likely to report being given the information from others. To better understand this, additional analyses (data not shown) reveal a relationship between the method of obtaining information and its perceived usefulness in increasing physical activity. More specifically, individuals who seek the information themselves are more likely to report that the information helped them to become more active (66%) and less likely to say that it had no influence at all (34%) compared to adults who had the information offered to them by others (34% state will help and 66% state that it will have no influence). Although this relationship holds irrespective of activity level, it appears stronger among those with higher activity levels than among those with lower levels. Those who are highly active who seek information themselves are more than twice as likely to view the information as useful in becoming more active than their counterparts who received the information from others (71% seeking versus 32% receiving). In contrast, among the least active adults, 55% of those seeking the information themselves said that it helped them to become more active versus 29% of those who received it from others. This would indicate that although the provision of appropriate information is a key activity, approaches that motivate individuals to seek out further information may increase the likelihood that they either pay greater attention to it or that it provides reinforcement and further motivates them. Approaches that lead to information seeking have the added advantage that the information could be better tailored to meet individual needs and circumstances. For example, it provides the opportunity to tailor messages to the person's "stage of change" and to address key issues related to overcoming perceived barriers and preventing relapse from their current activity level. Increasing awareness or motivating individuals to take a first step towards an active lifestyle, such as seeking information, seeking advice from family, friends, or health professionals, or making active choices in their usual routine²⁴ will be important among those with no intention. This is also important in for individuals in the "maintenance" stage in order to help with the prevention of relapse.

From the perspective of the general population, over the five-year period from 1999 to 2004, there was a dramatic decrease in the prevalence rate of adults who reported that the information helped them become more active. This is surprising. One can speculate that the reason for this is the higher proportion of individuals who state that they received information *both* through their own efforts and from others. As noted in the discussion above, adults not seeking the information themselves are more likely to state that the information does not influence their behaviour. This also happens to be more prevalent among older adults who are less active and inactive adults in general. Although there is

some understanding of the types of information that would help motivate inactive individuals to become more active, little is known about how to motivate inactive individuals to actually seek such additional information themselves. ‘Pushing’ information at inactive individuals is of benefit (with 29% rating information received as such), yet it appears that it might be even more effective if individuals could be ‘pulled’ into seeking the information themselves so that it reinforces their motivation to be more active. Interventions to increase adoption or maintenance of physical activity become challenging for practitioners given that (1) the majority of inactive Canadians have moderate intentions at best of becoming active (58%), and 29% of these respondents somewhat intend or have no intentions of becoming active at all and (2) inactive Canadians are more likely than active Canadians to report that it is somewhat or not at all feasible of fitting an ideal physical activity regime into their lives or that they could maintain such a regime only for less than 3 months.³ Further work is needed to find ways to do motivate the inactive population to become more active.

So what do we know about the type of information that could motivate the inactive population? For those individuals who may be less ready to increase their activity levels, an individualized or tailored approach may be effective. Such an approach would include strategies that reduce perceived barriers and increase knowledge of personal benefits and self-efficacy through cognitive and behaviour change and the appropriate use of delivery modes.²⁵ For the less active population, information on the benefits of physical activity, practical ideas on how to overcome perceived barriers to physical activity, how to easily access information on physical activity, practical suggestions on how to take steps to become more active, and information on how to incorporate physical activity into daily life may be useful. The least active individuals are most likely to make the greatest number of yearly visits to a doctor or other health professional.³ Counselling during consultations with physicians and other health care providers may prove to be an effective source for promoting physical activity among this population.^{26,27,28} Interventions such as PACE Canada (Physician-Based Assessment and Counselling for Exercise) or the Green Prescription have been shown to increase physical activity among those less active.^{29,28,27,26} Less active individuals are also more likely to obtain information on physical activity through television, so appropriate use of this communication vehicle may prove beneficial.²⁴

Previous research has shown that the majority of Canadians receive physical activity and sport information through the media, including television, newspapers, and radio.²⁴ The use of technology could be useful in implementing physical activity interventions. This may be particularly useful for national, provincial, and territorial governments or organizations promoting population-based interventions, as this communication mode can be used cost effectively to a population.³⁰ Television, itself, is currently cited as the most common media vehicle for receiving physical activity and sport information. Physical activity campaigns by national organizations have used these media successfully for increasing awareness of physical activity through a combination of media messages, marketing, educational information and community mobilization.³¹ Given that ParticipACTION’s last media campaign was in 1999,³² it is noteworthy that Canadians still remember and view this organization as credible.³ This suggests that messaging

campaigns with a consistent brand association can achieve long term impacts with respect to recall and brand recognition.³³ Furthermore, the more recent public-private partnership of *Canada on the Move* (see <https://www.canadaonthemove.ca/INMD/en/about.jsp>) with Kellogg's has shown that a campaign linking social advertising and a tool to both increase motivation and help individuals to self-regulate their behaviour can have significant impact in raising awareness and immediate short-term behaviour change.³⁴ The re-establishment of a multi-year social marketing campaign would be a key component in increasing the physical activity levels of Canadians by reinforcing and focusing the myriad of activities being undertaken by governments and agencies at all levels in the minds of Canadians.

In addition to transmission of health-promoting advertising using traditional media, such as television, radio and newspapers, marketing of sport can also be used directly in the sports setting. For example, an Australian study examined recall of a sun protection advertisement on a scoreboard. The study found that recall occurred among 15% of the spectators and was higher among using greater levels of sun protection, and higher among females. This is interesting information to consider for health- and sport-promoting advertising at sports events.³⁵ Finally, internet or intranet approaches may be useful in tailoring information to the needs of sport participants with respect to individualized counseling³⁶ for fitness training and sport-related skills.

Tailoring the information through appropriate use of vocabulary, graphics and illustration, as well as diffusing it using appropriate channels, such as ethnic associations, is important when targeting particular groups. For example, when customizing messages for individuals, focus more on what is required or involved in specific activities. For youth, a good example is illustrated through the Centers for Disease Control and Prevention's (CDC) VERB campaign, which is an initiative to increase physical activity among youth aged 9 to 13. The campaign associates with popular brands, and catches attention through the use of celebrities. The activities and products are promoted as "cool", fun, and motivating. The campaign uses paid advertising in general and ethnic specific media within age appropriate television and radio, print publications, or advertisements on bulletin boards (see <http://www.cdc.gov/youthcampaign/index.htm>). Another example is the CDC's campaign called "Powerful Bones: Powerful Girls" that promotes the benefits of weight bearing physical activities and healthy eating for young girls (see <http://www.cdc.gov/powerfulbones/stayingstrong/index.html>). "Wheeling Walks" is an example of a community campaign targeting sedentary older adults uses media to increase walking in Virginia, U.S. (see <http://www.wheelingwalks.org/index.asp>). When targeting specific population groups (e.g., low income or ethnic cultures) it is also important to understand and supply suggestions to overcome key barriers specific to those groups.^{33,37}