
PHYSICAL ACTIVITY AND THE MEDIA

What messages are Canadians receiving?

Executive summary
1998 media study: an inmedia analysis



—a CFLRI project initiated in partnership with—

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

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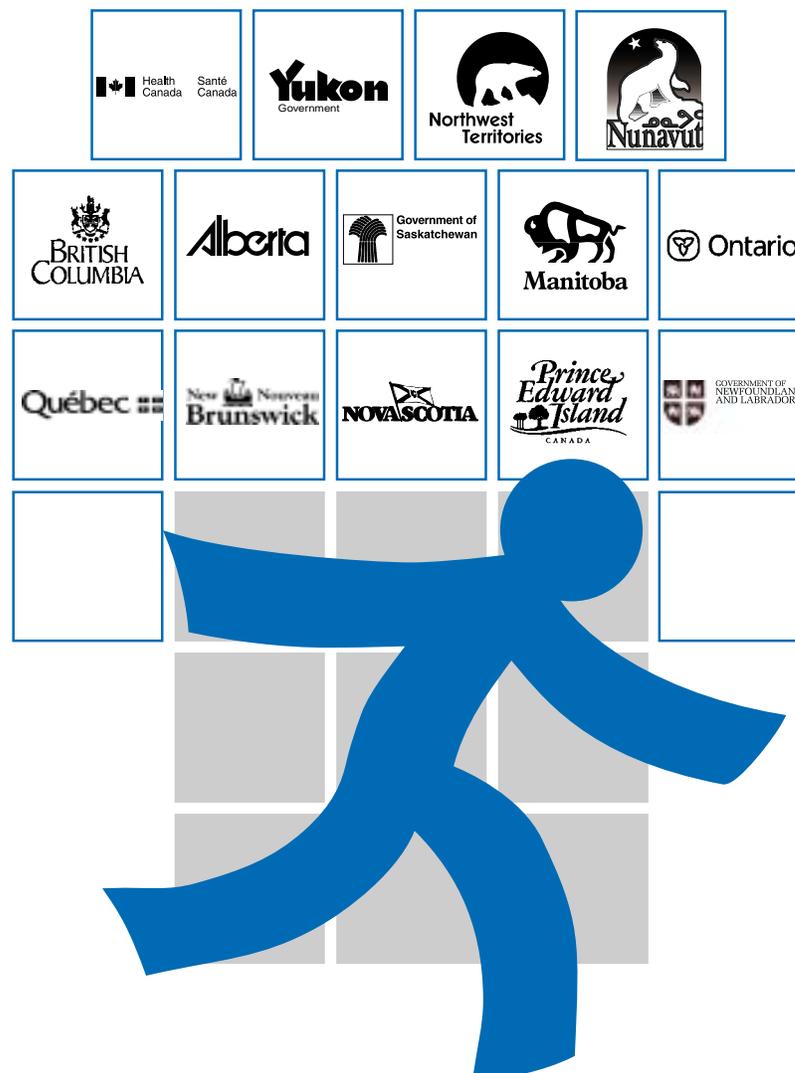
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Introduction

Background

Despite earlier success, the level of physical inactivity has remained constant during the latter half of the 1990s.¹ The recognition of sedentary living as a major health issue² and the adoption of the multi-level government goal to reduce physical inactivity³ have helped to renew the attention on this issue and coordinate efforts among partners. The magnitude of the change required and the complexity of the underlying issues imply that a considerable, sustained effort is necessary to ensure appropriate individual and collective change—individual change by encouraging Canadians to become more active and collective change by creating more supportive social and physical environments—while ensuring sufficient capacity to act at both these levels. Only by having an appropriate balance between individual and collective strategies can change occur.

Over the past quarter century, considerable research has focused on understanding and predicting behaviour. The Theory of Reasoned Action⁴ states that attitude and social norms predict intention, which predicts action. Attitudes are affected by beliefs about the consequences of behaviour and by a subjective evaluation of each consequence. Social norms, on the other hand, are a function of both perceived expectations of people deemed important by an individual and motivation to comply with their expectations.⁵ Motivation can be divided into two components: intrinsic motivation, which is affected by internal factors such as personal satisfaction, feelings of well-being, and enjoyment, and extrinsic motivation, which is brought about by external incentives, rewards, acceptance by others, etc. The notion of perceived behavioural control was later added to the Theory of Reasoned Action, creating the Theory of Planned Behaviour.⁶ Behavioural control is often explained in terms of perceived barriers to physical activity. While further research is required to examine how changes in these factors predict changes in actions, all these factors have been found to be associated with differences in physical activity intentions and behaviour.

In their report entitled *Physical Inactivity: A Framework for Action*,² the federal, provincial, and territorial governments identified social marketing as a critical component of their joint efforts to create a more active Canada. While social marketing uses a variety of channels to provide information to target groups, mass communication strategies often form an important cornerstone of such campaigns. Messages can appropriately target most factors predicting action, including awareness of the benefits of physical activity, personal outcome expectations, guidance on the amount of physical activity required for benefits, attitudes, intrinsic motivation, and, through these, intention. Favourably affecting these factors may encourage behaviours associated with trying to become more active. Thus, while mass communication strategies cannot directly impact physical activity levels, they can influence the underlying factors associated with behaviour, particularly behaviours linked with the early stages of adoption. Therefore, depending on the design of communication strategies, reasonable outcomes could include increased awareness, higher expectations of particular outcomes associated with being active, more positive attitudes, reduction in perceived barriers, increased intentions to become active, and increased prevalence of behaviours associated with trying to become more active (e.g., seeking information, observing a class, etc.).

In their discussion of social marketing, Donovan and Owen⁷ synthesized the current knowledge of social marketing, outlining how it might be used for promoting physical activity and highlighting considerations based on marketing models. They noted that mass media campaigns are unlikely to succeed on their own and must be supported by more comprehensive marketing strategies and interventions to increase opportunities, create environments that support physical activity, and develop strategies to maintain the behaviour and prevent relapse. This does not reduce the importance of social marketing in general, nor mass communications in particular, in encouraging Canadians to become more active. Rather, it is consistent with other reviews⁸ concluding that a comprehensive strategy is required, which balances the strategies to change individual behaviour with strategies to make the social and physical environments more supportive of physical activity.

*Increasing Physical Activity: Creating Effective Communications*¹ presents 1998 population data about Canadians' understanding of physical activity (e.g., the frequency required for targeted health benefits), knowledge of the benefits of physical activity, attitudes, intention, steps taken to become more active, and physical activity levels. These elements derive from the following hierarchical communication model, addressing key factors of the Theory of Planned Behaviour:

- exposure,
- attention,
- understanding or knowledge,
- acceptance or attitude,
- intention,
- trial, and
- success.

Alongside the 1998 population data, collected through the Physical Activity Monitor, a separate 1998 study examined the mass media coverage of physical activity, in terms of the exposure and content of messages that appeared primarily in major daily newspapers. This media study explored five steps of the above model: exposure (reach and number of articles), understanding or knowledge (benefits of physical activity and guidelines), attitudes, intention, and trial (early adoption behaviours). However, rather than examining messages to determine whether they contained these predefined elements, analysts performed a content analysis to see whether these aspects emerged from the media messages (further details appear in the Methods section).

Scope of the report

The attached report provides detailed information about the messages that emerged in the selected physical activity articles that appeared in the mass media in 1998. The analyses are descriptive, providing information for each major message and specifying:

- leading media outlets,
- the placement of the article,
- key authors or by-lines,
- reach, in terms of circulation rates.

Methods

Media articles were obtained from Health Canada's electronic database of clippings. The clippings were collected primarily from the major national and provincial daily newspapers (dailies), but also included several articles from magazines and the network media. While these dailies have been identified as the key influential news media from a federal perspective, there may be gaps from a provincial and territorial perspective.

Articles were obtained by searching the database using the following keywords in English and French: physical activity, exercise, active living, fitness, and sedentary. As indicated by the keywords, articles concerning mass participation were being sought. This appears to have been achieved given the lack of placement of the captured articles in the Sports section of newspapers. While the Canadian Fitness and Lifestyle Research Institute collected population data in the spring and fall of 1998 via the Physical Activity Monitor, media articles were selected for the period spanning January to December 1998. In addition to covering the Physical Activity Monitor period, this longer coverage period permitted assessment of the coverage of articles in January–March, prior to the spring survey, in the summer months, prior to the fall survey, and in the late fall, after the release of *Canada's Physical Activity Guide to Healthy Active Living*.⁹ All articles were sent to a professional media analysis firm, *inmedia*, for subsequent content analysis.

Of the 532 articles obtained through the Health Canada database, 48 were screened out by *inmedia* as being outside the study period, and a further 115 were screened out as duplicates or as not being relevant (e.g., financial exercise related to government budgetary period). Only 10 articles were related to the Guide release. A separate database of clippings tracked by the Institute (from articles supplied by Bowden's clipping service) contained 39 articles related to the Guide, some of which were duplicates of Health Canada's, indicating the presence of different criteria or methods for adding articles to, and retrieving articles from, Health Canada's database. We have been unable to identify and document Health Canada's exact processes for filtering, indexing, and archiving of the daily stream of media coverage. It has been posited that a criterion might have been the mention of Health Canada or Fitness/Active Living Unit in the articles. This was not substantiated given that Health Canada figured fifth or sixth in the list of top sources, placing it below Statistics Canada. To further explore the extent of this discrepancy, a search for articles pertaining to the release of the *1997 Physical Activity Benchmarks Report* by the Institute in January 1998 was performed. As was the case with the Guide coverage, the Health Canada database contained fewer articles than did the Institute's database: only 13 of the 209 articles present in the Institute database appeared in Health Canada's database. A significant proportion of the Institute clippings came from weekly or monthly papers, which explains part of the apparent undercoverage in the Health Canada database. Together, these two sources indicate that there might have been substantially more articles concerned with physical activity in the media during this period than are considered in this study.

The resulting 369 articles from 70 media outlets were coded into meaning units (first tier) and then grouped into successively higher-order meaning units (second tier and third tier) by trained media analysts. Details of the coding methods are summarized on pages 163–164 and in the appendices of the attached report. Results were entered into *inmedia*'s proprietary database, *inmediatrack*, which was expanded to track the frequency of message appearance in addition to

its standard tracking of the frequency of articles. The formation of the coding structure between the first and second tier meaning units is illustrated in the appendices.

Structure of the report

The executive summary provides an introduction to the study and a synopsis of findings from the *inmedia* content analysis. It provides baseline information on physical activity messages in the mass media during 1998, their placement, and their reach. The attached detailed report by *inmedia* is organized in 10 sections:

1. **Executive summary**—the most frequent messages in the media during 1998 (referred to as higher-order meaning units).
2. **Coverage profile of all articles**—overview of where articles appeared (*Toronto Star*, *Montreal Gazette*, etc.), leading by-line (i.e., author), type of article (news, feature, editorial, etc.), placement (Lifestyle, News, Business, etc.), province of outlet origin, and month.
3. **Top 10 messages**—up to the 10 most frequent messages (the most general or third-order meaning units, also referred to as the highest-order meaning units) identified by each of four analysts (referred to as “coders”), with a summary of the most frequent underlying messages (more specific or second-order meaning units).
4. **Coder 1 coverage profile**—a coverage profile like that provided in section 2, but for each of the 10 most frequent messages developed by coder 1, based on the English articles.
5. **Coder 2 coverage profile**—a coverage profile like that provided in section 2, but for each of the 10 most frequent messages developed by coder 2, based on the English articles.
6. **Coder 3 coverage profile**—a coverage profile like that provided in section 2, but for each of the 10 most frequent messages developed by coder 3, based on the French articles.
7. **Coder 4 coverage profile**—a coverage profile like that provided in section 2, but for each of the 10 most frequent messages developed by coder 4, based on the French articles.
8. **Physical activity guide**—a coverage profile like that provided in section 2, but for 29 articles related to the release of *Canada’s Physical Activity Guide to Healthy Active Living*; this profile was developed by coder 1.
9. **Top sources**—details of where the information in the articles was obtained or who was quoted.
10. **Methodology**—information on article capture, list of outlets and circulation, and description of coding and analysis, which includes the specifics of the coding structure for the first- and second-tier meaning units (most of the coding structure for the third tier is presented in sections 4 through 7).

Key findings

Exposure and attention

- A total circulation exceeding 50 million was associated with the 369 articles investigated as part of the 1998 media study. This represents multiple exposures to physical activity messaging, with the largest outlet, in terms of circulation, printing 23 articles on this topic. While these circulation figures are accurate as a total for the articles in the study, they represent an underestimate of the total circulation of articles covered by the media in 1998.
- While not necessarily covering the release of *Canada's Physical Activity Guide for Healthy Active Living*, most of the articles were published in October and November, generally coinciding with the release of the Guide in mid-October.
- The media origin of the articles is reflective of the population distribution across the country. That is, Ontario—the province with the largest population—was the most frequent media origin with 117 articles totalling 20 million in circulation. Ontario represents over one-third of Canada's population and likewise represented almost one-third of the circulation of the captured articles.
- Not surprisingly, the coverage of the articles by type of outlet mirrored that of the Health Canada database, with dailies being the leading source of articles. However, the CBC and CTV Television Networks also figured prominently in terms of circulation, but not in the frequency with which they covered the topic.
- Considerable attention was given by media to the captured articles related to physical activity. This statement is based on the subjective assessment that placement in the News section of the paper denotes a higher degree of attention being paid to an article than the same article appearing in a later section (e.g., Lifestyle, Technology, Sports, etc.). In fact, over 40% of all articles included in this study appeared in the News section, yielding a circulation of 21.6 million, and a further 35% of all articles appeared in the Lifestyle section, for a circulation of 22.1 million.
- While these findings demonstrate that articles on physical activity are newsworthy and can capture the attention of the media, their relative prominence might reflect, at least in part, an increase in the likelihood that they would be captured in Health Canada's database. That is, the difference between Health Canada's central database and the Institute's internal database, which contained more articles for 1998, may be related to the placement of articles in other sections like the Lifestyle or Health and Fitness sections. This warrants further investigation prior to drawing firm conclusions about the relative placement of articles more generally.

Message content

The content analysis was replicated by two analysts (or coders) in each language because the detection of key messages from articles is a qualitative process, with phrases open to interpretation depending on the context in which they are presented. The **higher-order meaning units** represent the key messages that a reader is likely to glean from the articles. That is, while

there are many messages in the articles that are derived from the phrases and the context in which the phrases appear, many of the messages represent shades of meaning within a more global message. For example, the detailed messages “increased physical activity could increase life expectancy by as much as two years” and “30 minutes of moderate activity will improve health” were both deemed by coder 1 to represent the more general message “physical activity is a sure way to maintain a healthy lifestyle.” This more general message was in turn combined with other general messages such as “physical activity prevents heart disease and stroke” to develop the higher-order message “physical activity provides health and longevity.” This means that while Canadians might have received and understood the individual lower-order messages that appeared in the media (e.g., increased physical activity could increase life expectancy by as much as two years), they were more likely to recall the combined higher-order message (e.g., physical activity provides health and longevity).

There was a reasonable degree of consistency in the results derived from coders 1 and 2, who analyzed the English articles, and coders 3 and 4, who analyzed the French articles, particularly in deriving the second-order meaning units from the more specific meaning units. There were some differences in the way the second-order units were combined, however. Whereas coder 1 separated positive from negative messages in developing the higher-order messages, coder 2 combined them. For instance, coder 2 created a key message saying “Activities (including physical and active lifestyle) are good for health and inactivity is harmful,” whereas coder 1 created two separate messages: “Physical activity provides health and longevity” and “inactivity has a negative impact on one’s life.” Overall, however, the higher-order meaning units provide a good profile of the primary types of messages relating to physical activity that were communicated through the media during the assessment period.

Canada’s Physical Activity Guide to Healthy Active Living was developed and launched in 1998 to serve as one element in a nation-wide strategy to reduce physical inactivity in Canada. Two types of objectives sparked its development: 1) mass communication objectives to influence the determinants of physical activity and 2) behavioural objectives to increase first-step behaviours for becoming more active. The mass communication objectives were to increase awareness and understanding of the health-related benefits of physical activity, inform Canadians of the minimum dose for targeted public health benefits, and increase motivation to take a first step to become more active (e.g., read how-to information, seek information on programs and services, get ready by observing a class, trying new activities, or increasing existing ones). The lead up to and release of the Guide in October 1998 by the federal government and its partners focused on these communication objectives and occurred within the usual backdrop of media activity.

The following synthesis presents the key messages that Canadians were likely to have gleaned from articles appearing in the media in 1998, some of which were a result of government communication strategies to release the Guide. These key messages are organized according to the framework of the Hierarchical Communication Model.¹⁰ They represent the more global, higher-order meaning units in the analysis and are listed with details of the number of times the message occurred, the total number of articles in which the message appeared, which coder derived the message, and whether the message appeared in the English or French media. Some messages may apply to more than one element in the communication model, depending on the context, and have been listed accordingly. In addition, second-order messages contribute to an

individual's overall understanding of the content of the article, although they are less likely to represent the "take away" message from the media articles. Sections 4 through 7 provide additional detail on the most frequent second-order meaning units for each of the global, higher-order messages featured in the following summary.

Understanding/knowledge

Messages to increase awareness of the benefits of physical activity and prevention of life-threatening disease figure prominently in the media.

- Physical activity provides health and longevity (522 mentions in 165 articles, coder 1, English media)
- Inactivity has a negative impact on one's life (261 mentions in 91 articles, coder 1, English media)
- Activity is good for health and inactivity is harmful (134 articles yielding 547 mentions, of which 492 were positive, coder 2, English media, plus another 14 mentions in 7 articles, coder 4, French media)
- Exercise is good for health (404 mentions in 94 articles, coder 2, English media)
- Exercise provides health and longevity (323 mentions in 103 articles, coder 1, English media)
- Promoting, encouraging, supporting physical activity is important, vital to health (299 mentions in 63 articles, coder 2, English media)
- Medical information and guidelines about exercise, physical activity, and fitness (37 mentions in 5 articles, coder 3, French media; 36 mentions in 7 articles, coder 4, French media)

Canadians are receiving mixed messages about whether or not they are active enough for targeted public health benefits.

- Recommendations for exercise (477 mentions in 63 articles, coder 2, English media)
- People are not active (351 mentions in 99 articles, coder 1, English media)
- People are not active, not active enough, inactive (403 mentions in 92 articles, coder 2, English media, plus 42 mentions in 7 articles, coder 3, French media)
- People should be active (415 mentions in 143 articles, coder 1, English media)
- People are active (238 mentions in 83 articles, coder 1, English media)
- Medical information and guidelines about exercise, physical activity, and fitness (37 mentions in 5 articles, coder 3, French media; 36 mentions in 7 articles, coder 4, French media).

Attitude

While most messages potentially shaping people's attitudes were positive, some messages in the French media might lead people to believe that physical activity is potentially harmful.

- A gentle approach to fitness is best (307 mentions in 80 articles, coder 2, English media)
- People enjoy being active (gaining popularity, kids enjoy) (113 mentions in 34 articles, coder 1, English media)
- Gender issues concerned with physical activity (32 mentions in 5 articles, coder 3, French media; 14 mentions in 6 articles, coder 4, French media)

- Take safety precautions for exercise, physical activity, and fitness, prepare yourself well (24 mentions in 4 articles, coder 3, French media)

A relatively frequent message was that physical activity could be tailored to one's own needs, potentially contributing to a sense of personal control over decisions about how to be active.

- Physical activity can be tailored to a person (209 mentions in 75 articles, coder 1, English media)

Intention

Messaging contributes to a supportive social norm for physical activity by communicating widespread support and encouragement for active lifestyles. These messages, together with messages to positively shape attitudes, can help build a collective intention to be more active among Canadians.

- Government supports active living (89 mentions in 46 articles, coder 1, English media)
- People (business, organizations, institutions, schools) are supporting, encouraging, offering physical activity and exercise programs (469 mentions in 69 articles, coder 2, English media; 18 mentions in 6 articles for coder 3, French media; 57 mentions in 4 articles, coder 4, French media)
- Government involvement in promotion of physical activity in Canada (214 mentions in 72 articles, coder 2, English media)
- Information (literature, surveys, books, studies) on exercise, physical activity, and fitness (45 mentions in 12 articles, coder 4, French media)

Trial/adoption

Media messages provide information about how to take a first step toward increasing physical activity and encourage Canadians to do so.

- A gentle approach to fitness is best (307 mentions in 80 articles, coder 2, English media)
- Popular forms of exercise (296 mentions in 44 articles, coder 2, English media)
- Information (literature, surveys, books, studies) on exercise, physical activity, and fitness (180 mentions in 64 articles, coder 2, English media, plus 45 mentions in 12 articles, coder 4, French media)
- Learning about and preparing for physical activity is important (108 mentions in 41 articles, coder 1, English media)
- Take safety precautions for exercise, physical activity, and fitness, prepare yourself well (24 mentions in 4 articles, coder 3, French media)

Implications

The mass media can be an effective partner in achieving the communication objectives associated with the goal of reducing physical inactivity.

The content of *Canada's Physical Activity Guide for Healthy Active Living* was developed to provide a consistent foundation for messaging by the federal, provincial, and territorial governments and their partners. The 1998 media study found a good match between the mass communication objectives associated with the Guide and the global and second-tier messages that appeared in the selected articles. Specifically, the major media messages dealt with the health-related benefits of physical activity and with information to shape attitudes and social support to increase motivation to take a first step to become more active. While the articles may have appeared in the media from many sources, it is noteworthy that most of the frequent sources listed for the articles were partners of the federal, provincial, and territorial governments who were aware of the planned launch of Canada's Guide. Certainly, the Canadian Fitness and Lifestyle Research Institute—the most frequently cited source—consciously tailored its messages to conform to the national communication objectives of the Guide. Hence, while only 16% of the articles captured during the release period for the Guide dealt specifically with its release, the content of the Guide indirectly shaped much of the messaging in other articles, through the work of partners.

The minimum dose required for targeted health benefits appeared to be more difficult to communicate, with mixed messages occurring in this respect in the press. However, communicating the actual recommended minimum dose may be of lesser importance than other objectives, because Canadians who are the least active would not likely deem it feasible to make a large enough change in their activity behaviour to reach the required amount. Rather, it is imperative that a clear message be communicated that is simple, consistent, and correct and that will lead Canadians *closer* to the minimum dose established by the Guide. One such message might encourage people to do some physical activity every day.

From the geographic distribution of the mass media articles, it is fair to conclude that the articles reached Canadians nationwide. Nevertheless, given the lack of community newspapers in the database, it is possible that the coverage was limited to larger cities. Moreover, there is a clear opportunity for repeated exposure of physical activity topics in the media, since the 70 media outlets in the study featured an average of five articles each and the largest outlet in terms of circulation printed 23 articles. Thus, the mass media can communicate and reinforce key messages in an overall strategy to create a more active Canada. Finally, positioning articles as news could increase the likelihood that they are placed in the News rather than the lesser read Lifestyle section, and this may in turn increase the attention paid to them by individuals. After the News section, the next best newspaper sections to target at the national level are the Entertainment/Movie/TV/Radio section for 18–49 year-olds, the Editorial pages for 50–59 year-olds, the Sports section for older men, and the Food section for older women.¹¹

How can physical activity be positioned as newsworthy? In studying the media coverage of chronic diseases, Van der Wardt and colleagues concluded that fatality rates, not prevalence

rates, captured the attention of the media and increased the likelihood that an article was covered.¹² This would mean that stories including death rates among the sedentary, or years of life lost because of inactivity, are more likely to receive coverage than stories discussing the prevalence of inactivity and potential reductions in the prevalence of chronic disease. Clearly, this is not the only factor influencing coverage, however, as Hoffman-Goetz and MacDonald have shown that the relative coverage of articles about site-specific cancers did not reflect their relative death rates.¹³

Schooler and colleagues have concluded that “frequent, regular, systematic contact with media professionals and provision of materials influence newspaper coverage.”¹⁴ Greenberg and Wartenberg provide the following tips for health professionals:¹⁵

- Go to an interview with two or three points that you want a journalist to present to the public.
- Assume no background, because journalists have different academic backgrounds.
- Avoid jargon.
- Go prepared with a press release of risk information.
- Stay within the limits of your experience.
- Be prepared to answer some questions that you would prefer not to answer. Be prepared for reporters trying to find parties to blame and political angles to feature.

These principles have equal relevance for framing public messages about physical activity.

Messages appearing in the media are consistent with population levels of knowledge, attitudes, and first-step behaviours toward physical activity.

There is a surprisingly high degree of consistency between messages appearing in the mass media during the period covering January to December 1998 and the population data gathered by the Physical Activity Monitor during the spring and fall of 1998. An earlier media study found a potential rate of misunderstanding among readers approaching 40% on reading articles for the first time.¹⁶ The consistency noted here may reflect the longer coverage period of the topic as well as earlier coverage prior to the study period, the greater repetition occurring across articles, or differences in the subject matter of the articles. The most consistent findings between the 1998 Physical Activity Monitor¹ and the media study include:

- *Canadians are generally aware of the benefits of physical activity*—consistent with this finding from the Physical Activity Monitor, the media study showed that the health benefits of physical activity were at the heart of the most frequent message appearing in media articles.
- *Canadians generally hold positive attitudes toward physical activity*—over one in five media articles conveyed information that could help to positively shape attitudes.
- *Over half of Canadians intend to be active*—credible sources cited in the media articles were quoted as supporting and encouraging active living. Messages can help to increase intention by influencing attitudes toward physical activity and perceived social norms. The use of credible sources may help to contribute, at least to some extent, to individuals’ perceived expectations of others whose opinions about their physical activity behaviour are deemed

important to them. This, in turn, could contribute to perceptions of a positive social norm for physical activity.

- *Canadians are taking steps to become more active*—messages in the media articles provided general information about physical activity as well as specific recommendations for getting started (see the second-tier meaning units supporting the message “A gentle approach to fitness is best,” identified by coder 2). This is consistent with the first steps reported in the Physical Activity Monitor, in which over half of Canadians reported reading articles about physical activity in newspapers, books, or magazines, with a view to becoming more active.
- *The majority of Canadians do not understand the minimum amount of activity required*—while it may not be desirable to communicate the minimum amount of physical activity required for reasons noted earlier, there are nonetheless conflicting messages in the mass media such as “People are not active, not active enough, inactive” versus “People are active.”

A messaging strategy has been adopted by the Federal, Provincial and Territorial Fitness and Recreation Committee¹⁷ based on information from the 1995 and 1997 Physical Activity Monitors. An examination of participation trends, beliefs, attitudes, self-efficacy, perceived barriers, time use, and life circumstances led to the creation of a common set of messages by the Communication Task Force, their subsequent adoption by federal, provincial, and territorial governments, and promotion of their use to partners. The messages focused on the common messages “Take a first step,” “Try it,” “Do a little more, a little more often” and were customized for particular target groups after thorough consideration of their needs based on the above aspects from the Physical Activity Monitor. Subsequent results from the 1998 Physical Activity Monitor indicated that messages are needed to address gaps in knowledge, correct misconceptions, build self-efficacy, increase motivation, and create supportive social norms.

Mass communication strategies are one piece of the picture. Social and physical environments also need to support physical activity.

Mass communication strategies are part of a mix of communication and environmental change strategies, which together will help governments to achieve their goal of reducing physical activity by 10% by 2003.

Successful interventions are characterized by:⁸

1. Promoting multiple patterns of physical activity.
2. Employing environmental change strategies to make social and physical environments more conducive to physical activity.
3. Developing a comprehensive messaging strategy, in which the messages are complementary, reinforcing while building on one another, and tailored specifically to different population segments.
4. Including and integrating strategies for communication, environmental change, and community mobilization.

5. Integrating approaches across levels and sectors to coordinate and thereby increase efficiency.
6. Using healthy public policy to develop supportive social and physical environments.
7. Obtaining the endorsement of Ministers and key community leaders.
8. Target settings for environmental change strategies as well as a means for reaching individuals.
9. Providing information through multiple channels, with mass media as an adjunct.
10. Linking physical activity strategies to other risk-factor strategies for consistency, reinforcement, and added reach.

This analysis of media coverage leading up to and following the release of *Canada's Physical Activity Guide to Healthy Active Living* suggests strongly that overall, Canadian partners are doing a good job of creating appropriate public messages to promote greater physical activity. The next steps in our media efforts involve developing messages around how much physical activity people need to do, conveying more messages to help people take the first steps toward becoming active (i.e., how-to messages), and using the mass media to promote the development of supportive physical environments for physical activity.

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 - ⁸ Schooler, C. (1995). *Physical activity interventions: Evidence and implications*. Toronto, ON: Queen's Printer of Ontario. See also www.lin.ca.
 - ⁹ 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.
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 - ¹¹ Federal-Provincial/Territorial Advisory Committee on Fitness and Recreation. (1999). *Making Optimal Use of the Media to Promote Active Living: Workshop Participant Binder*. Ottawa, ON: Fitness/Active Living Unit, Health Canada.
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