

# research update



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## Highlights of the 2005 Physical Activity Survey: Understanding the Role of Determinants in Physical Activity Behaviour

### BACKGROUND

The recently released 2005 Alberta Survey on Physical Activity (Bengoechea, Spence, & Fraser, 2005a) has a good news message: Albertans are becoming more active! A major strength of the Alberta survey is that it used the same questionnaire for the 2000, 2002, and 2005 surveys, making it possible to compare results across years. This comparison shows a significant increase in leisure-time physical activity. Currently, 60.2% of Albertans are active, compared with 54% in 2000 (Bengoechea, Spence, & Fraser, 2005b).

The 2005 survey also highlights the importance of the role that health determinants play in physical activity behaviour. Determinants are the broad range of personal, social, and environmental influences on physical activity. We've moved beyond the focus on individual responsibility to recognize that socio-demographic (e.g., education, income), psychological (e.g., self-efficacy), and environmental variables (e.g., neighbourhood design) all affect physical activity.

### SURVEY HIGHLIGHTS

Women are becoming increasingly active. Historically, men have been more active than women (Sallis & Owen, 1999). However, this gap is closing in Alberta, with no reported significant differences between men and women (60.4% and 60.1% activity rates respectively).

Unfortunately, younger people continue to be more active than older people. While 75.5% of 18-to-24-year olds were sufficiently active, this percentage dropped to 44.9% for adults aged over 65. Interventions targeting older adults are thus still a priority.

Similar to other research (see Sallis & Owen, 1999, for a review), the Alberta survey showed that education significantly affected activity levels. Albertans with a high school or post-secondary education are more likely to be active than those who have not finished high school.

Psychological variables associated with increased physical activity include confidence in being able to participate in regular physical activity and a belief in the health benefits of physical activity.

People with lower income reported less physical activity. This result mirrors the findings of other researchers who have reported that Canadians are more likely to be in poor health if they have a lower income (Canadian Institute for Health Information, 2004). According to CIHI data, people in the low-income group are more likely to be single parents, people with a long-term disability, off-reserve Aboriginals, and recent immigrants.

Finally, perceptions of neighbourhood convenience (such as having shops close to home) and perceived access to places that allow physical activity were significant environmental predictors of physical activity.

### WHAT THESE RESULTS MEAN

These findings underscore the need to look at people within their environments in order to improve the health of Albertans. For example, the CIHI (Canadian Institute for Health Information, 2004) found that home and school environments that promote healthy food and activity choices can help protect against obesity. Owen, Humpel, Leslie, Bauman, & Sallis (2004) have also shown that convenient places to walk (e.g., trails) positively affect walking and having places to walk to, such as shops, also leads to more walking. As Spence and Lee (2003) point out, changing the environment to enhance physical activity can potentially influence all members of the community. Spence and Lee also outline how people change behaviours in response to the environment. More people are likely to be physically active if the available environment is attractive and conducive to activity.

Although the most recent Alberta physical activity survey (Bengoechea, Spence, & Fraser, 2005a) showed increases in physical activity, the Canadian Community Health Survey (Canadian Fitness and Lifestyle Research Institute, 2005) reported lower rates of physical activity (53%) than the Alberta survey. The discrepancy is likely due to different survey methods and different definitions of physical activity. Further, measuring physical activity levels is difficult because we often rely on self-report. Although respondents are probably not deliberately deceitful, they may not recall their activities accurately. For example, Sallis and Owen (1999) reported that the questionnaire used in the Alberta physical activity survey is more accurate for vigorous physical activity than for mild or moderate physical activity. People might accurately remember when they went for a run, but not time spent walking or taking the stairs.

Although we have much good news to report, there is still work to do. As the authors of the 1999 Alberta Survey of Physical Activity noted, "encouraging more Albertans to become physically active will require a shift in policies and practices that reflect this broader health determinants thinking" (Spence & Poon, 2000, p. 9). Today, as then, it is important to understand that physical inactivity is a public health issue.

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References for this article are available at [www.centre4activeliving.ca](http://www.centre4activeliving.ca).

# Communicating Health Messages

## BACKGROUND

Consumers now receive an unprecedented volume of nutrition and physical activity information from the Internet, television, radio, and print. Although Canadians want to protect their health, they are also growing more frustrated with mixed messages about nutrition and physical activity (Patterson, Satia, Kristal, Neuhouser, & Drewnowski, 2001; CTV News Staff, 2002).

Organizations have tended to tailor health-promotion messages to suit their own mandates. The result is confusing health-promotion messages from government, the food, health, and fitness industries, consumer groups and health-promotion specialists (Goldberg, 1992). Developing shared health messages may be a way to maximize the communications impact of health-promotion messages (National Institute of Nutrition, 2000).

## METHODS

### Consumer and Health Intermediaries Surveys

The ALPINE Project, a partnership of 10 Alberta and national health-promotion organizations, released a health-promotion newspaper insert in 2003. Just over 1 million copies went out in Alberta newspapers. Project partners also sent the insert to key health intermediaries in Alberta and across Canada.

The Project used data from three questions in the insert contest to assess consumers' recall and understanding of the embedded common health messages. The first question asked respondents about key learnings from the insert about a healthier lifestyle. (To deal with this question, the Project team grouped all insert information into themes. All key learnings were coded to one of 11 themes to identify information that most interested readers.) The other two questions asked people to identify the insert's key healthy eating and active living messages.

In 2004, Alberta health intermediaries also completed a survey about their impressions of the insert and its usefulness in their practice.

## RESULTS

### Consumer Survey

**a. Sample configuration.** Almost 2,900 adults completed the contest entry forms. Respondents' SES approximated the overall Alberta population for most income brackets (based on a comparison with Statistics Canada, 2004). Half of respondents came from urban areas, and half lived in rural areas. The lowest response rate came from people between 18 and 29, and the highest response rate came from people over 50. Women were also more likely to respond than men (2,527 female and 340 male responses).

### b. Key message recall.

- **Healthy eating:** Ninety-four per cent correctly identified the minimum number of servings from the four food groups in Canada's Food Guide to Healthy Eating.
- **Active living:** Eighty-two per cent correctly identified the three components of physical activity as "endurance, flexibility and strength." Eighteen per cent of those with correct responses gave examples of each type of physical activity (e.g., gardening, biking, or jogging).

**c. Preferred types of information.** Respondents clearly preferred the "tools" category, e.g., highly practical articles, "clip and save" features, and visual aids, such as the pantry list and portion-size guide.

**d. Demographics.** There were clear demographic differences in people's key learnings.

- **Age:** People over 50 tended to relate to the chronic disease, healthy eating, and active living information and to the insert's advertisements. Those aged 18 to 29 and 30 to 39 were more likely to be interested in role modelling information. People aged 40 to 49 preferred tools more often than those who were younger or older.
- **Gender:** Women were more often interested in role modelling information and tools, while men more often related to advertisements.
- **Urban vs. rural.** Urban respondents more often cited information in advertisements and tools. Respondents from rural Alberta tended to prefer articles about role modelling and chronic disease.

### Health Intermediaries Survey

**a. Sample configuration.** Ninety-five respondents (9% male, 91% female) completed the survey (a response rate of 3.5%).

**b. Impressions of the insert.** Most respondents (82%) agreed that the insert had practical applications in their practice. Sixty-eight per cent felt that the information was appropriate for both males and females. Eighty per cent of respondents saw the insert as most appropriate for adults between 30 and 39. Health intermediaries were also more likely than consumers to be interested in tools.

Most respondents perceived the insert as "very effective to moderately effective" in teaching the basics of Canada's Food Guide to Healthy Eating (77%) and Canada's Physical Activity Guide for Healthy Active Living (73%). Seventy per cent felt that the insert's messages were "very important" to consumers.

## CONCLUSIONS

Our findings support the effectiveness of mass media communications and common messaging in improving identification and recall of health information. Most consumer respondents identified the common messages embedded in the insert. Health intermediaries also supported using this method to increase awareness of nutrition and physical activity and strategies to prevent chronic disease.

We see an urgent need for a formal evaluation of common messaging initiatives. Only with this kind of data, will this novel approach expand to benefit the health of the community.

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