

Leisure-Time Physical Activity (LTPA) among Albertan Adults, 2000 to 2005

BACKGROUND

The growing body of scientific evidence on the benefits of physical activity (e.g., Katzmarzyk, Gledhill, & Shephard, 2000; US Department of Health and Human Services, 1996) has led to an interest in studying trends in adult physical activity participation in some industrialized countries. Participation has recently declined in Australia (Bauman et al., 2003) and England (Prior, 1999) and stayed the same in the United States (Macera & Pratt, 2000). However, as in Finland (Helkaperi, Uutela, Prattala, & Puska, 2000), physical activity levels of Canadian adults aged 18 years and older have recently increased (Craig, Russell, Cameron, & Bauman, 2004).

However, data on physical activity trends in particular regions of different countries remain scarce. In Alberta, the Alberta Centre for Active Living has surveyed Albertan adults every other year since 1995. Comparable data in the 2000, 2002, and 2005 surveys allow us to track physical activity trends over time.

METHOD

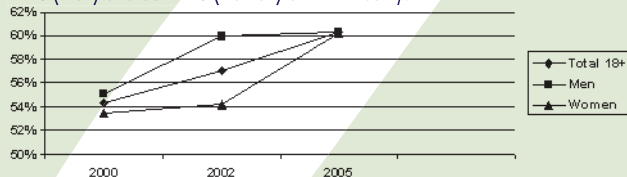
This report is based on cross-sectional data collected in 2000, 2002, and 2005 by the Population Research Laboratory of the University of Alberta. The three surveys were based on provincially representative random samples of Albertan adults. In addition, all three used the same questions to assess physical activity levels and socio-demographic characteristics, and all adopted identical scoring methods. Sample sizes of the three surveys ranged from 1,201 to 1,209. Data were weighted to compensate for sample sizes in the Edmonton, Calgary, and "Other Alberta" categories, as these were not proportional to the Alberta population they represent.

We used the Godin Leisure-Time Exercise Questionnaire (Godin & Shephard, 1985) to estimate leisure-time physical activity (LTPA) levels. Albertans were considered sufficiently physically active if they expended at least 38 METs a week for men or 35 METs a week for women. (A MET is a unit of resting metabolic rate. Thus, two METs equal an intensity twice the resting metabolic rate.) These cut-off values come from several researchers (Elosúa et al., 2000; Jacobs, Ainsworth, Hartman, & Leon, 1993; Paffenbarger, Wing, & Hyde, 1978). We then created two variables for physical activity: inactive or active.

Differences in activity between population groups based on socio-demographic characteristics were determined by calculating odd ratios (OR) and their 95% confidence intervals (CI). We also conducted chi-square tests to assess changes in the prevalence of LTPA from 2000 to 2005.

Graph 1: Leisure-Time Physical Activity Among Albertan Adults

The graph below shows the % of Albertan adults who accumulate an average of 38 METs (men) and 35 METs (women) of LTPA weekly.



Graph notes: Chi square significant ($p < 0.01$) for the trend (2000-2005) for Total 18+. Chi-square significant ($p < 0.05$) for the trend (2000-2005) for women.

RESULTS

The trend in LTPA between 2000 and 2005 among Albertan adults is significant. Physical activity levels increased significantly among Albertan adults in the six years of this study. In fact, Albertan adults were 1.27 times as likely to be sufficiently active in 2005 as in 2000.

Women were 1.31 times as likely to be considered sufficiently active in 2005 as in 2000. The increase in the percentage of sufficiently active men almost reached statistical significance over the six years. Men were 1.24 times as likely to be sufficiently active in 2005 as in 2000.

Age differentials decreased slightly from 2000 to 2005. In 2000, other age groups were only 16% to 37% as likely to be active as the youngest age group. By 2005, other age groups were only 26% to 56% as likely to be active as those aged 18 to 24 years (the older the age group, the lower the level of LTPA, both in 2000 and 2005). The 55 to 64 and the 65+ groups' levels of LTPA were pretty much the same in both years. However, the decrease in LTPA for all age groups compared to the 18 to 24 group is lower in 2005 than in 2000.

Differences due to educational status widened over the same period. The 2000 survey showed almost no differences among groups due to education. In 2005, those with the higher two levels of education were about 1.5 times as likely to be sufficiently active as those in the lowest level. This difference, however, did not reach statistical significance.

Finally, results point to an income gradient in physical activity in Alberta. Both in 2000 and 2005, those with the higher level of income were significantly more likely to be sufficiently active than those with the lowest income level.

CONCLUSIONS

Leisure-time physical activity levels increased significantly among Albertan adults between 2000 and 2005. This increase is similar to the increased physical activity among Canadian adults between 1981 and 2000 (Craig et al., 2004). However, in the Craig et al. study, the increased physical activity between 1995 and 2000 was only among men. In our study, the increase was found in both men and women.

Despite the encouraging results, physical inactivity remains a concern, particularly among older adults and people of low socio-economic status. Therefore, efforts to promote physical activity participation among all Albertans should be continued.

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Healthy Growth in Children Toolkit: Translating Public Policy into Frontline Practice

PURPOSE OF THE TOOLKIT

A recent national public policy statement recommended new growth monitoring standards and which growth charts to use with Canadian children from birth to 20 years (Dietitians of Canada, Canadian Paediatric Society, College of Family Physicians of Canada, & Community Health Nurses Association of Canada, 2004). This policy statement created both the need for more resources for health professionals and for public education, including sensitive messaging about children's growth and any suggested action or referral, such as nutrition counselling by a registered nutritionist/dietitian.

Growth monitoring is the routine measurement of growth parameters to detect extremes in growth (Panpanich & Garner, 2005). *Growth assessment* involves measuring weight and length (in children from birth until two to three years of age) or height (measured in children two to three years of age and older). These measures are then plotted on an age- and sex-specific growth chart to assess how the child is growing. Health professionals can then take action when the child is not growing as expected. Growth assessment can also help identify if a child is potentially overweight or underweight.

In Alberta, public health clinics assess children's growth during their vaccination visits. These visits provide an opportunity to promote lifestyle habits that support healthy growth, i.e., healthy eating, physical activity, and positive body image.

Alberta Health and Wellness provided funding to develop a toolkit for health professionals in public health clinics. The toolkit helps these professionals assess children's growth between two months and six years. The goals of the toolkit include

- increasing the capacity of various health regions to implement growth monitoring guidelines;
- facilitating a consistent process for growth assessment;
- promoting consistent messaging about growth.

HOW WAS THE TOOLKIT DEVELOPED?

A multi-disciplinary advisory committee, including public health nurses, eating disorder prevention specialists, a paediatrician, and a medical officer of health, reviewed professional and parent resources and supported disseminating the toolkit. Toolkit content was determined from reviews of published literature, adaptations of existing regional resources, and feedback from focus group discussions.

Focus groups with public health nurses explored how these nurses discussed a child's growth with parents and obtained nurses' input on sample growth messages and the questions used in discussing growth. Focus groups with parents from rural and urban Alberta focused on parents' experience with their child's weight and length/height being measured, how health professionals explained their children's growth, and parents' reaction to sample growth messages. Parents were also asked what type of support and guidance they would find helpful.

Focus groups confirmed that food, activity, and growth are sensitive issues for parents. Nurses use (and parents want) simple everyday language. For example, the term "concern" should only be used when further action is needed. Feedback from focus groups helped tailor the toolkit's counselling guide's messages to parents.

The results of these focus groups led to the core messages of the toolkit. The acronym SHIFT (shown in the boldface words below) helps health professionals remember these core messages:

- weight and length/height measurements are health **Screening** tools;

- growth is one sign of general **Health**;
- guidance is provided for the **Individual** child/family;
- growth reflects **Family** growth patterns;
- growth pattern over **Time** is more important than one single measurement.

WHAT'S IN THE TOOLKIT?

The Counselling Guide and Background Information

The toolkit's counselling guide helps health professionals to assess children's growth and offer consistent messages to parents.

Professionals first plot a child's weight and length/height on age and sex-appropriate growth charts. Depending on the child's growth percentile and pattern, the counselling guide outlines

- key messages and points about healthy eating and physical activity to share with parents;
- suggested parent handouts or community offerings;
- actions recommended as a result of the growth assessment such as referral to a physician or registered dietitian.

Background information for health professionals includes how to discuss growth assessment with families; general guidelines on infant feeding; growth patterns specific to exclusively breastfed infants; toddler and preschooler food and beverage intake; physical activity guidelines for preschoolers and infants (Dietitians of Canada, 2003; National Association of Sport and Physical Education, 2002); the importance of the feeding relationship and family mealtimes; and parents' body image.

Health Professional Orientation Tools

Public/community health nutritionists in Alberta have received the toolkit to distribute in their health regions (Benson, 2005). They have also received a ready-to-use presentation to orient health professionals such as public health nurses and clinical dietitians.

Parent/Caregiver Fact Sheets

Handouts expand on information in the soon-to-be-released Alberta Health and Wellness resource, *Healthy Eating and Active Living for 1-5 Year Olds*. Topics include healthy snacks and activities, body image, and growth. Content was provided for a visual tool showing toddler and preschooler portion sizes.

Community Initiatives

The toolkit lists Alberta community initiatives that promote healthy growth in toddlers and preschool children. This list encourages health professionals to consider broader strategies to promote healthy growth in children.

Distribution and Dissemination

The toolkit was launched in April 2005 at the provincial public health nutritionists' spring meeting, distributed to all health regions, and posted on www.dthr.ab.ca/healthygrowth. We also oriented public health nutritionists about how to use the toolkit within their health region. We hope that public health nutritionists will work with colleagues within each health region to implement the toolkit.

The toolkit's availability has increased provincial capacity to implement the growth monitoring standards recommended in a recent public policy statement (Dietitians of Canada, Canadian Paediatric Society, College of Family Physicians of Canada, & Community Health Nurses Association of Canada, 2004). Working collaboratively has reduced duplication, supported consistent messaging throughout the province, and allowed for multi-disciplinary input. We are currently evaluating our process (to be completed in the fall of 2005).

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