

# **Preventing Type 2 Diabetes in Ethnic Youth: Resources for Community Use**

## **Resource Guide for Youth, and their Families and Caregivers**

The opinions expressed in this publication are those of the authors and do not necessarily reflect the official views of the Public Health Agency of Canada.

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**Canadian Ethnocultural Council**

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# I. Introduction

This resource guide addresses the high prevalence of type 2 diabetes in youth in certain communities, despite the fact that type 2 diabetes can be prevented or delayed. The guide contains information on minimizing modifiable risk factors for developing diabetes, some primary prevention strategies, and details about ways to meet the challenges to primary prevention.

*Preventing Type 2 Diabetes in Ethnic Youth: Resources for Community Use*, has been created with several purposes in mind. The first, and most important, purpose is to increase knowledge about type 2 diabetes. A second purpose is to encourage and give suggestions for lifestyle changes in youth at risk of developing type 2 diabetes. A third purpose is to help increase individual and community capacity to meet the daunting challenge presented by the increased incidence of type 2 diabetes.

This guide is primarily designed to assist young persons who are at risk of developing type 2 diabetes. It will also help their caregivers and communities. The youth who have been specifically selected are those of African, Asian, and Hispanic origins. Statistics have shown that youth from these communities have a particularly high risk of developing type 2 diabetes.

Obesity is a growing problem among youth, as more and more youth are physically inactive. Both obesity and physical inactivity contribute to the development of type 2 diabetes. With this in mind, the guide also presents some useful examples of program models for youth that help to decrease obesity, increase physical activity, and develop healthy lifestyles. These can prevent, or at least delay, the occurrence of type 2 diabetes.

The resource guide includes a listing of publications and programs related to type 2 diabetes in youth that have come to our attention. This list, which is not exhaustive, shows varied approaches to preventing or delaying the occurrence of type 2 diabetes. Other useful publications and programs are undoubtedly available across the country.

The guide also contains a listing of cookbooks containing healthy recipes that will help caregivers in meal planning, and a glossary that defines commonly used terms in the area of type 2 diabetes prevention. A list of useful and reliable websites will guide interested users in gathering more information in specific areas.

The resource guide can be used in different ways. Specific programs can be adapted and used by youth, families, or communities to support physical and social environments that encourage activity and healthful living. The contact information can also help individuals gather more information on program planning, delivery, and management.

Creatively used, this resource guide can help to generate or facilitate links among health practitioners, researchers, and organizations that deal with the youth who are at risk of developing type 2 diabetes.



## II. Resources for Prevention of Type 2 Diabetes in Youth

### II a. Publications

#### Physical Activity

**2007 Alberta Survey on Physical Activity.** The survey, conducted to monitor the physical activity of Alberta residents, used a sample of 1,207 adults aged 18 years and older. The survey had three separate geographical sub-samples: Edmonton, Calgary, and the rest of the province. The survey gathered information on demographics, current leisure-time physical activity, beliefs, attitudes, and perceptions about neighbourhoods. The data show that 62 percent of Albertans are sufficiently active. The most significant factors affecting leisure-time activity are age, number of children under age 18, general self-efficacy, coping self-efficacy, intention to participate in physical activity, and the availability of convenient physical activities in neighbourhoods.

Alberta Centre for Active Living  
[www.centre4activeliving.ca](http://www.centre4activeliving.ca)

**Better Environmentally Sound Transportation (BEST).** This booklet on Healthy Communities and Active Transportation contains programs that encourage and motivate people to cycle, walk, carpool, and use public transit. BEST champions clean air, safer neighbourhoods, and environmentally friendly transportation choices. BEST works with individuals and community leaders to facilitate changes that will contribute to a better quality of life for people and communities in the Lower Mainland of Vancouver.

Better Environmentally Sound Transportation  
[www.best.bc.ca](http://www.best.bc.ca)

**Canada's Physical Activity Guide for Youth.** This guide provides directions to help youth increase physical activity. It encourages youth to increase time spent in physical activity and reduce inactive time spent using the TV, computer, etc.

Health Canada  
[www.healthcanada.ca/paguide](http://www.healthcanada.ca/paguide)

**Canada's 2007 Report Card on Physical Activity for Children and Youth.** This is the third annual overview of the physical activity levels of Canada's young people. For the third straight year, Canada has received a failing grade of D, which indicates that overall progress in improving physical activity among children and youth has stalled. Child and youth physical inactivity in Canada is still a major public health concern. Although three consecutive years of poor grades is disappointing, some progress has been made and opportunities for improvement exist.

Active Healthy Kids Canada  
[www.activehealthykids.ca](http://www.activehealthykids.ca)

**Diabetes, Exercise and You.** This simple booklet provides information on the kind of exercises that are helpful, tells how to get started, gives essential information such as the target pulse rate, and details important safety precautions.

Vancouver Hospital and Health Sciences Centre, Education Support Services

Cat. No. FL870 D541.

[www.vanhosp.bc.ca](http://www.vanhosp.bc.ca)

**Family Guide to Physical Activity for Youth 10-14 Years of Age.** This guide aims to help parents understand the importance of more activity and suggests ways they can help youth become more active. The guide details the benefits of being physically active, notes ways to change behaviour, and suggests how to track and monitor progress. It also contains a poster and a few success stories.

Public Health Agency of Canada

[www.paguide.com](http://www.paguide.com)

**Health and Fitness Benefits of Physical Activity.** This guide provides Canadians with clear and concise guidelines on how to achieve better health through making physical activity an important part of daily living. It is a tool designed primarily to help inactive Canadians take the first steps towards building physical activity into their lives – at home, at school, at play, and in all other aspects of their lives.

Public Health Agency of Canada

[www.paguide.com](http://www.paguide.com)

**Healthy Lifestyle Leadership for Youth.** The goal of the project was to help youth develop leadership in promoting healthy lifestyles. Youth used the website, posters, and white bracelets to promote the FIGHT (Find Inspiration Get Healthy Today) message to their peers. The youth who were involved gained both leadership skills and a high school credit for their participation. A template of this youth-driven initiative can be found on the Health in Action Website ([www.health-in-action.org](http://www.health-in-action.org)).

Lethbridge Community College Be Fit for Life Centre

[www.lethbridgecollege.ab.ca/departments/students/befitforlife](http://www.lethbridgecollege.ab.ca/departments/students/befitforlife)

**Healthy Weight Online: Healthy Weight, Healthy You.** On this Heart and Stroke Foundation website, click on Healthy Weight / Healthy You to receive information on how to have and maintain a healthy weight.

Heart and Stroke Foundation

[www.heartandstroke.ca](http://www.heartandstroke.ca)

**Let's Get Active. Magazine for Youth 10-14 Years of Age.** This magazine provides information on how to build more physical activity into daily life. It helps to chart current physical activities and time spent on each. It includes a quiz and crossword puzzle to test knowledge of physical activity and its benefits, some facts on the body (muscles, skin, etc.), types of activities, how to increase physical activity in youth, and setting workable goals for incorporating activity into daily life.

Public Health Agency of Canada

[www.paguide.com](http://www.paguide.com)

**Physical Activity Levels Among Youth (CAN PLAY) Survey.** This major national survey, currently being conducted by The Canadian Fitness and Lifestyle Research Institute (CFLRI), examines physical activity levels of children and youth. The first nation-wide study of its kind, CAN PLAY will provide an objective report of current fitness and physical activity patterns among Canada's young people. Approximately 10,000 children and youth (about 6,000 families) have been randomly selected across Canada for the study that began in 2005 and will be conducted annually until 2010. This data will be essential in developing long-term solutions and programs for a more active and healthier younger generation.

Canadian Fitness and Lifestyle Research Institute  
[www.cflri.ca](http://www.cflri.ca)

**POWER (Promotion of Optimal Weights through Ecological Research).** The Healthy Alberta Communities project team, a part of the Centre for Health Promotion Studies at the University of Alberta, uses a variety of community partnerships to assist communities in making changes towards more active living and in removing barriers that prevent individuals from accessing opportunities to healthy living choices.

University of Alberta  
[www.power.ualberta.ca](http://www.power.ualberta.ca)

**SHAPES-Ontario School Health Action, Planning and Evaluation System.** This report for Ottawa High Schools, based on a December 2005 survey, provides information on smoking and physical activity. It is designed to assist community partners (educators, students, and public health professionals) in planning and targeting initiatives to prevent tobacco use and to increase physical activity levels in schools.

University of Waterloo  
[www.shapes.uwaterloo.ca/ontario/](http://www.shapes.uwaterloo.ca/ontario/)

**Teacher's Guide to Physical Activity for Youth 10-14 Years of Age.** This guide was developed to assist teachers, who are in daily contact with youth, in helping youth change their thinking and behaviour concerning physical activity. Teachers can reduce non-active pursuits and help youth increase physical activity while facilitating learning. The guide gives teachers some proven methods to include physical activity in their classrooms and to motivate students.

Public Health Agency of Canada  
[www.publichealth.gc.ca/physicalactivity](http://www.publichealth.gc.ca/physicalactivity)

**Walk and Roll.** The Canadian Council for Health and Active Living at Work developed this guide to active transportation to, from, and at the workplace. The guide is developed for active living coordinators in the workplace, recreation coordinators, health promotion counselors, and others who may be responsible for workplace-centred programs that promote healthy lifestyles.

Go For Green  
[www.goforgreen.ca](http://www.goforgreen.ca)

## **Healthy Eating**

**Diabetes and Healthy Eating**, 2006. This brochure provides nutritional information and a sample meal plan; it was developed to help individuals control diabetes.

Vancouver Coastal Health

[www.vch.ca](http://www.vch.ca) and <http://vch.eduhealth.ca>

**Eating Well with Canada's Food Guide**. The focus is on the benefits of eating well. The side focus, under the heading of "Maintaining Healthy Habits," stresses the virtues of being active every day. The guide provides information on the amount and types of food recommended for children, teens, and adults for optimal personal health and vitality.

Health Canada

[www.healthcanada.gc.ca/foodguide](http://www.healthcanada.gc.ca/foodguide)

**Nutrition Labeling**. On December 12, 2005, nutrition labeling became mandatory for most prepackaged foods. Smaller businesses had until December 12, 2007, to put this information on their food packages. This change mandates a standardized nutrition fact table on food labels that makes this information easy for consumers to find and follow.

Health Canada

[www.healthcanada.gc.ca/nutritionlabelling](http://www.healthcanada.gc.ca/nutritionlabelling)

## **Healthy Active Living**

**Barriers and Enablers to Healthy Active Living in Children: Key Findings in Six Nova Scotia Communities**. This report identifies key barriers and enablers to physical activity and healthy eating practices. The information was compiled with input from children in Grades 5-8, parents, and community leaders. Each group also identified strategies to help improve physical activity and healthy eating behaviours.

Canadian Diabetes Association, Nova Scotia Division

[www.diabetes.ca/Section\\_Regional/ns\\_activechildren.asp](http://www.diabetes.ca/Section_Regional/ns_activechildren.asp)

**The Vitality Approach – A Guide for Leaders 2000**. This guide includes tips and tools for healthy living and maintaining a healthy weight. It was developed for the use of leaders who work in the areas of healthy eating, active living, and healthy weight.

Health Canada

[www.hc-sc.gc.ca](http://www.hc-sc.gc.ca)

## **Diabetes Education and Prevention**

**Beyond the Basics: Lifestyle Choices for Diabetes Prevention and Management**. This manual, developed to provide current, useful information to aid in diabetes prevention and management, contains a meal planning system created by diabetes experts from across Canada. It has sections that deal with meal planning for communities from the Caribbean and Africa; South, East, and Southeast Asia; and Central and South America.

Canadian Diabetes Association

[www.diabetes.ca](http://www.diabetes.ca)

**Communities Act: Making Changes Happen.** This book contains stories told by people in British Columbia who were involved in diabetes projects from 2001-2004. Sharing the stories provides evidence that community action can make a difference.

Public Health Agency of Canada

[www.phac-aspc.gc.ca/ccdpc-cpcmc/diabetes-diabete/english/pubs/index.html](http://www.phac-aspc.gc.ca/ccdpc-cpcmc/diabetes-diabete/english/pubs/index.html)

**Diabetes Fact Sheets.** Two fact sheets on the role of eating and activity in controlling diabetes have been prepared for and used extensively in aboriginal communities. The sheets are: “Living Well with Diabetes: Active Living” and “Living Well with Diabetes: Healthy Eating.”

Health Canada: Aboriginal Diabetes Initiative

[www.healthcanada.ca/diabetes](http://www.healthcanada.ca/diabetes)

**Preventing Diabetes in Atlantic Canada, 2000.** The study conducted in Atlantic Canada showed that preventing diabetes was not a priority in the region, although many organizations did carry out prevention activities. It notes that a successful strategy to prevent diabetes requires increasing the ability for organizations and individuals to work with other sectors in creating environments that encourage healthy choices.

Population and Public Health Branch, Atlantic Region Office, Health Canada

[www.phac-aspc.gc.ca/canada/regions/atlantic/pdf/diabetes\\_e\\_pdf](http://www.phac-aspc.gc.ca/canada/regions/atlantic/pdf/diabetes_e_pdf)

**Projects Plus.** This is the newsletter of the Atlantic Region Prevention and Promotion Contribution Program of the Canadian Diabetes Strategy. It contains brief updates on some of the collaborative activities in Atlantic Canada that are aimed at promoting wellness and reducing chronic disease.

Public Health Agency of Canada, Atlantic Region

[www.phac-aspc.gc.ca/canada/regions/atlantic/](http://www.phac-aspc.gc.ca/canada/regions/atlantic/)

**Standing Together.** This comic book contains stories and artwork about a variety of health issues, such as diabetes and empowering individuals to take personal responsibility for their health. It is published by the Vancouver Coastal Health and Healthy Aboriginal Network.

Vancouver Coastal Health

[www.vch.ca](http://www.vch.ca)

**The Learning Series.** This is a suite of presentations providing information on diabetes prevention and management. *Growing Up Well*, geared to youth 9-13 and 14-19, promotes prevention and healthy lifestyle choices among children and youth.

Canadian Diabetes Association (local office)

[www.diabetes.ca](http://www.diabetes.ca)

**Together We Can Beat Diabetes.** The Quebec Diabetes Association published this brochure.

Quebec Diabetes Association

[www.diabete.qc.ca](http://www.diabete.qc.ca)

## Newsletter

**Healthy Canadians Newsletter.** Published by the Government of Canada and reviewed by qualified professionals, this newsletter is sponsored by the Public Health Agency of Canada, Health Canada, Canadian Heritage (Sport Canada), and the Canada Revenue Agency.

Public Health Agency of Canada  
[www.phac-aspc.gc.ca](http://www.phac-aspc.gc.ca)

## Calendar

**2007-2008 *in motion* School Calendar.** This one-page calendar helps schools or teachers follow the classroom “in motion” schedule. It is available on the Internet and can be downloaded, printed, and shared with students and teachers.

[www.in-motion.ca/resources/](http://www.in-motion.ca/resources/)

## Catalogue

**2007 Publications Catalogue.** This annotated list contains health-related publications by the Canadian Public Health Association, American Public Health Association, Pan-American Health Organization, and World Health Organization. Some publications are youth-focused – including fostering physical activity, health behaviour, nutrition, and healthy living.

Canadian Public Health Association, Health Resources Centre  
[www.cpha.ca](http://www.cpha.ca)

**Print Health Education Materials Resource Catalogue.** This catalogue lists the wide range of print resources available from Vancouver Coastal Health (VCH) and Providence Health Care (PHC). The resources serve the public, community agencies, staff of VCH and PHC, and healthcare professionals.

Vancouver Coastal Health  
[www.vch.ca](http://www.vch.ca)

## Cookbooks/ Meal Planning Guides

**Beyond the Basics: Lifestyle Choices for Diabetes Prevention and Management.** This book contains sample meal plans for individuals of Caribbean, African, Asian, Southeast Asian, Latin, and Central and South American backgrounds.

Canadian Diabetes Association, 2007.

**Beyond the Basics: Meal Planning for Healthy Eating, Diabetes Prevention & Management.** This includes two especially helpful tools: a colourful, consumer-friendly meal planning guide (poster) and a consumer manual (more than 150 pages). Both resources are designed to help manage diabetes by eating healthy and tasty meals.

Canadian Diabetes Association, 2006.

**Canada's Best Cookbook for Kids with Diabetes.** This cookbook helps with the challenge of cooking for kids. It features more than 125 recipes tested by children and teens; many are simple enough for children to prepare. This cookbook uses the new Beyond the Basics meal planning guide.  
Canadian Diabetes Association, 2005.

**Choice Menus: An Easy Guide with Recipes for Healthy Everyday Meal Planning.** This book contains more than 100 mix-and-match menus for breakfast, lunch, dinner, and snacks. It offers easy planning to help individuals restrict their diet to 1,200 to 1,800 calories a day.  
Hollands, M. and Howard, M. John Wiley & Sons Canada Ltd., 2004.

**Complete Canadian Diabetes Cookbook.** This cookbook contains more than 250 flavourful recipes that embrace many different cooking styles.  
Published by R. Rose, 2005.

**HeartSmart Cooking for Family and Friends.** This book promotes healthy eating through recipes that are both nutritious and heart-healthy.  
Bonnie Stern. Random House, 2000.

**Meals for Good Health.** This meal planning book, accompanied by a DVD, provides recipes and meals for healthful eating and tells what quantities to eat.  
K. Graham, Paper Birch Publishing, 2006.

**More Choice Menus.** This unique, split-page format book provides more than 100 mix-and-match menus for breakfast, lunch, dinner, and snacks. It gives menus that will provide 1,200, 1,500, or 1,800 calories a day.  
Hollands, M. Canadian Diabetes Association, 2004.

**Multicultural Cooking Light and Easy.** This book features a large variety of easy-to-prepare recipes – from appetizers to desserts – that provide low-fat, high-fibre, and heart-healthy eating. The recipes are from countries around the world, and the book is published in cooperation with the Canadian Diabetes Association.  
Kay Spicer. Mighton House, 1995.

**Shopper's Guide to Healthy Eating.** The guide helps individuals select products suitable for a diet that is low in saturated fat.  
University Health Network, Toronto, 2004. [www.uhn.ca](http://www.uhn.ca)

**The New Lighthearted Cookbook: Recipes for Heart Healthy Cooking.** It contains more than 200 delicious recipes that are packed with nutrients and are low in fat.  
Lindsay, A. H. B. Fenn & Company, 2005.

## II b. Programs

### Physical Activity

**ACTIVE2010.** This comprehensive strategy is designed to increase participation in sports and physical activity throughout Ontario. This website contains resources for both leaders and specific population groups.

The Government of Ontario's Sport and Physical Activity Strategy

[www.active2010.ca](http://www.active2010.ca)

**Active and Safe Routes to School.** This national program was developed to encourage youth and their families to use active methods – such as walking, cycling, and rollerblading – to get to and from school.

Go For Green

[www.goforgreen.ca/asrts](http://www.goforgreen.ca/asrts)

**Live it Up...J'vis ma vie...** The goal of this program is to increase the number of youth-led, youth-driven physical activity programs in Ottawa high schools. With the support of youth facilitators, students are encouraged to create a school environment that advocates and supports the importance of daily physical activity and healthy food choices.

City of Ottawa

[www.ottawa.ca/residents/health/living/avtivity/live/index\\_en.html](http://www.ottawa.ca/residents/health/living/avtivity/live/index_en.html)

**On the Move.** This is a national initiative designed to increase opportunities for inactive girls and young women aged 9-18 to participate in sports and other physical activities. This innovative programming concept for females is participant-driven, with community-specific programs.

Canadian Association for the Advancement of Women and Sport and Physical Activity

[www.caaws.ca/onthemove/e/index.htm](http://www.caaws.ca/onthemove/e/index.htm)

**Power4bones: A School-based Bone Health Program of Ontario.** This free bone health education program for Ontario Grade 5 students was developed to improve students' awareness and knowledge of bone health and bone-healthy behaviours.

Dairy Farmers of Canada

[www.power4bones.com](http://www.power4bones.com)

**Saskatchewan *In Motion*.** This province-wide movement aims to increase physical activity to provide health, social, environmental, and economic benefits. *In motion* intends to ingrain the understanding and behavioural changes into the culture and fabric of the communities. The four program components are building partnerships, raising awareness, mobilizing communities, and monitoring and celebrating success.

Saskatoon Health Region

[www.saskatchewaninmotion.ca](http://www.saskatchewaninmotion.ca)

**The 4-H Clubs of Ontario.** 2007. This program, offered to all 4-H clubs, focuses on dance and non-traditional physical activities that can appeal to individuals not attracted by traditional sports programs.

4-H Clubs of Ontario  
[www.4-hontario.ca](http://www.4-hontario.ca)

**The Girls in Motion Program.** It is organized so that high school girls interact with and mentor the participation of grade 7 girls in a variety of activities such as salsa dancing, yoga, pilates, self defence, and weight training. It targets grade 7 girls from feeder schools who are not already active and have few social supports. The program has five goals. 1) To reach girls who are not involved in sports or other activities due to skill levels or cost restrictions. 2) To provide programs that are attractive for girls who live in the BC housing complex near Riley Park. 3) To provide opportunities for girls from diverse cultures who have varying abilities. 4) To encourage the high school girls to develop leadership skills. 5) To help youth participants build self-esteem and confidence, and improve their general outlook on life.

Riley Park Community Association  
[www.heygetout.ca/projects/youth/girlsinmotion.htm](http://www.heygetout.ca/projects/youth/girlsinmotion.htm)

**The OCASI Inclusive Model: The Model for Sports and Recreation Programming for Immigrant and Refugee Youth.** The objective of this project is to encourage and facilitate involvement of immigrant, refugee, and at-risk youth in recreation by identifying and disseminating information to sport/recreation stakeholder communities. The model identifies and uses 12 common elements necessary for an inclusive sports and recreation program for these youth, and it involves youth, parents, and volunteers. The OCASI Inclusive Model aims to ensure the inclusion of all youth in sports and recreation.

Ontario Council of Agencies Serving Immigrants  
[www.ocasi.org](http://www.ocasi.org)

**The Summer Physical Fitness Program.** This Ontario Ministry of Health Promotion program focuses on low-income youth (10-15 years) in 56 communities, and it runs during the summer months. The aim is to prevent or intervene to prevent youth from dropping out of school; the program activities are traditional and non-traditional, age-appropriate, fun, and non-competitive.

Ontario Ministry of Health  
[www.mhp.gov.on.ca/english/sportandrec/ciaf/grants0607-provincial.asp](http://www.mhp.gov.on.ca/english/sportandrec/ciaf/grants0607-provincial.asp)

**Walk-Jog Program** is a basic 5-week walk-jog training program. It is part of the High School Walk-Jog Club Leader's Guide to assist youth to be more active. The leader does not need any special experience, just an interest in helping students or staff become more physically active. The aim of the club is to encourage students who are inactive or only moderately active to incorporate physical activity into their everyday lives. The hope is that the experience will positively influence their knowledge, attitudes, and lifestyle behaviours.

*In Motion* Saskatoon Health Region  
[www.saskatchewaninmotion.ca](http://www.saskatchewaninmotion.ca)

**Winnipeg In Motion.** This program helps to increase the activity levels of individuals in their own community. The benefits of increased activity levels include a stronger community, better individual health, and personal and social development.

Winnipeg Regional Health Authority  
[www.winnipeginmotion.ca](http://www.winnipeginmotion.ca)

### **Healthy Eating**

**Cooking For Your Life** is a hands-on cooking and nutrition program that helps participants prepare simple, healthy meals through a course taught by dietitians. The program is offered in a number of communities throughout British Columbia. Classes are available in Cantonese and for hearing-challenged persons.

Canadian Diabetes Association  
[www.diabetes.ca/section\\_regional/bc\\_healthy.asp](http://www.diabetes.ca/section_regional/bc_healthy.asp)

**EatRight Ontario.** This is a free service to residents of Ontario. The service provides easy-to-use nutrition information to help in making healthier food choices. Registered dietitians are employed to answer nutrition questions either by phone or e-mail.

Ministry of Health Promotion, Government of Ontario  
1-877-510-5102  
[www.eatrightontario.ca](http://www.eatrightontario.ca)

**Making It Happen: Healthy Eating at School.** This project was created to inspire and enable school communities in British Columbia to develop better nutrition policies and practices. Possible outcomes include schools making changes in vending machine policies and school boards changing recess and lunchtime practices.

BC Ministry of Health and Knowledge Network  
[www.knowledgenetwork.ca/makingithappen/site\\_index/index.html](http://www.knowledgenetwork.ca/makingithappen/site_index/index.html)

**Young Chefs Program: Boys and Girls Club of Bonnyville.** This program aims to teach youth in Bonnyville, Alberta, the importance of healthy eating and active living in preventing type 2 diabetes. Youths participate in weekly cooking sessions where they learn to choose healthy recipes, create shopping lists, review tips on healthy eating with dietitians and others, discuss diabetes and physical activity, and learn how to incorporate healthy living into their daily lives.

Boys and Girls Club of Bonnyville  
[www.bgcalberta.com](http://www.bgcalberta.com)

## **Healthy Active Living**

**Living School Initiative.** This program helps entire communities – students, parents, teachers, administrators, boards of education, public health departments, sport and recreation organizations, community coalitions, local businesses, and municipal governments – work together to support and enhance active, healthy living for children and youth. It is a comprehensive solution to improving the health of Ontario's children and youth that does not replace existing programs or services but rather integrates, energizes, and provides focus for them.

Living School c/o Opeha Ontario Physical and Health Education Association  
[www.livingschool.ca](http://www.livingschool.ca)

## **Diabetes Education and Prevention**

**Aboriginal Diabetes Awareness, Prevention and Teaching (ADAPT).** The goal is to address the high rates of diabetes and its complications among aboriginal individuals living in East Vancouver. ADAPT promotes a culturally and community appropriate approach to diabetes prevention and health promotion. It also contains a training program to enable aboriginal youth to lead physical activity groups: Youth Peer-Leader Training. Vancouver Native Health Society

[www.vnhs.net/programs/diabetes.htm](http://www.vnhs.net/programs/diabetes.htm)

**BC Health Guide Program.** This self-care program provides health information and helps participants make better health decisions.

Government of British Columbia, Ministry of Health  
[www.bchealthguide.org](http://www.bchealthguide.org)

**Community Diabetes Education Program.** The Centretown Community Health Centre in Ottawa educates and supports people with type 2 diabetes. Registered nurses from a variety of cultural backgrounds work with the respective cultural communities.

Centretown Community Health Centre  
[www.centretownchc.org](http://www.centretownchc.org)

**Culturally Responsive Diabetes Prevention Education Project: Strengthening Collective Capacities for Healthy Living in Ethnocultural Communities.** The project goal was to help seven ethnic minority communities in Edmonton take action on diabetes prevention and promote healthy living. Multicultural health brokers worked with each community to plan and implement culturally appropriate activities. The activities ranged from general information sessions on diabetes, nutrition, and active living to organizing collective kitchens where participants learned to make traditional recipes more healthful. Multicultural Health Brokers Co-Op Ltd., Edmonton  
[www.mchb.org](http://www.mchb.org)

**Development and Implementation of a Community-Based and Culturally-Sensitive Diabetes Prevention and Management Program.** The project developed appropriate resources on diabetes awareness and prevention for Indo-Asians at temples, mosques, and community centres. Additionally, the project developed six television-based, diabetes-prevention education programs in Punjabi.

Calgary Health Trust, Calgary  
[www.calgaryhealthtrust.org](http://www.calgaryhealthtrust.org)

**Diabetes Prevention and Education Program.** This program has a goal of planning and implementing diabetes prevention activities in the community. It also includes a diabetes referral process for providing linguistically and culturally appropriate support for persons who have diabetes and for their caregivers.

Multicultural Health Brokers Co-Op Ltd., Edmonton  
[www.mchb.org](http://www.mchb.org)

**Kahnawake Schools Diabetes Prevention Program.** This program in Quebec involved the entire community in helping to develop a diabetes prevention curriculum. The program promoted a good nutrition policy at school and developed supportive school and out-of-school activities. The long-term program objective was the primary prevention of type 2 diabetes. It stressed decreasing obesity and encouraging fitness, and it taught good eating habits and ways to become more physically active. The results have been increased physical fitness, involvement in sports, and consumption of fruit drinks.

Kahnawake Schools Diabetes Prevention Project  
[www.ksdpp.org](http://www.ksdpp.org)

**KIN Healthy Community Project.** The project goal was to promote the prevention of type 2 diabetes through developing and implementing sustainable strategies that enhanced healthy eating and active living opportunities for low-income children and their families. The families were taught planning, shopping, and cooking skills.

Womanspace Resource Centre Lethbridge, Alberta  
[www.telusplanet.net/public/womanspa](http://www.telusplanet.net/public/womanspa)

**Knowledge Exchange Network (KEN).** This network develops summaries of evidence-based programs and identifies effective practices in chronic disease prevention (healthy living) and palliative care. It gives community groups evidence to use for decision-making in chronic disease prevention (healthy living) and palliative care planning. It also bridges the gap between research and users of research information.

Canadian Cancer Society, Manitoba Division  
[www.mb.cancer.ca](http://www.mb.cancer.ca)

**Primacy Healthy Living Program.** Primacy has partnered with Loblaw Companies Limited, Canada's largest food distributor, to provide free dietitian service to the community. It is offered in Ontario and the Eastern Provinces. Activities include one-on-one counselling, grocery store tours, healthy cooking classes, etc.

Primacy Dietitians  
[www.primacyrd.ca](http://www.primacyrd.ca)

**Vancouver Chinese Diabetes Education Centre.** The Centre holds regular education programs and offers follow-up sessions. Each program, designed for individuals with diabetes and their families, consists of two 4½ hour-long sessions. A registered nurse and registered dietitian, both of whom speak Chinese, conduct the teaching program.  
S.U.C.C.E.S.S. Vancouver  
[www.vch.ca/diabetes/chinese.htm](http://www.vch.ca/diabetes/chinese.htm)

**WOLF Program** (A Way of Life for Families). This program promotes the prevention of diabetes in aboriginal youth. The program aims to facilitate a balanced and healthy lifestyle by promoting awareness of diabetes prevention through collaboration with key stakeholders in the Alberta Capital Health Region.  
University of Alberta  
[www.ualberta.ca/OUTREACH/teachers.htm](http://www.ualberta.ca/OUTREACH/teachers.htm)

## **II c. Kits**

**5 Plus 5 Challenge Kit.** This kit encourages users to be physically active for 30 minutes at least five days a week and to eat five servings of vegetables and fruits every day. This personal challenge aims to assist users to lead an active and healthy lifestyle.  
*In Motion* Saskatoon Health Region  
[www.in-motion.ca/resources/](http://www.in-motion.ca/resources/)

**Centennial *in motion* Monthly Physical Activity Log.** This physical activity log is laminated so it can be used to record monthly physical activities with a dry eraser. It provides instructions on using the log, and it explains the amount of physical activity recommended and the benefits of physical activity.  
*In Motion* Saskatoon Health Region  
[www.in-motion.ca/resources/](http://www.in-motion.ca/resources/)

**Do More Watch Less Challenge: Family Resource.** This provides tips and tools to help families reduce screen-time (in front of TV and computers). The **Classroom Resource** gives lessons and tools that explain the importance of reducing screen time.  
*In Motion* Saskatoon Health Region  
[www.in-motion.ca/resources/](http://www.in-motion.ca/resources/)

**Eating and Activity Tracker.** This tool from the Dietitians of Canada can be used to track daily food and activity choices, get feedback on how healthy those choices are, and provide suggestions for ways to improve choices.  
Dietitians of Canada  
[www.dietitians.ca/eatracker](http://www.dietitians.ca/eatracker)

**Healthy Living Strategic Alliance Toolkit.** This is designed to assist organizations in collaborating to create common ties among various healthy living initiatives, programs, or messages. Information, ideas, and resources developed by one government can be shared with others and adapted, as needed, to suit different populations. This allows wider use by Canadians and reduces the necessity of developing a program, which might be similar to an existing program, from the ground up.

Public Health Agency of Canada

[www.phac-aspc.gc.ca](http://www.phac-aspc.gc.ca)

**Kids with Diabetes in Your Care.** The Resource Kit provides basic information to people who care for children with diabetes. Designed to ensure the safety and success of kids with diabetes, it is a valuable resource for teachers, parents, families, and youth leaders.

Canadian Diabetes Association

[www.diabetes.ca/Section\\_About/kidswithdiabetes.asp](http://www.diabetes.ca/Section_About/kidswithdiabetes.asp)

**Nutrition Month.** Every March is celebrated as Nutrition Month and the theme, which changes every year, is always related to food and nutrition.

Dietitians of Canada

[www.dietitians.ca/eatwell](http://www.dietitians.ca/eatwell)

**PACE Canada.** This program includes both a Tool Kit and Counseling Guide for healthy active living. It was designed to assist physicians in effectively increasing patients' physical activity levels and improving patients' eating habits. It helps physicians gain accurate and up-to-date information on physical activity, nutrition, and health. It also provides training opportunities to help develop effective behaviour in patients with diabetes.

Canadian Fitness and Lifestyle Research Institute

[www.pace-canada.org](http://www.pace-canada.org)

**School Healthy Eating Toolkit.** The Prince Edward Island Healthy Eating Alliance developed this resource manual, and it supports the implementation of elementary school nutrition policies to help kids make healthier choices. Other provinces have requested the use of the toolkit as a template to help them develop school nutrition policy implementation manuals.

PEI Healthy Eating Alliance

[www.gov.pe.ca/peihea/](http://www.gov.pe.ca/peihea/)

**Snactivity Box.** This Alberta-based program provides caregivers with a hands-on toolkit designed to help children form healthy lifestyle habits at a young age. It contains fun and interactive activities to encourage healthy eating and active living habits. These include *Restaurant*, which helps children learn to make healthy food choices when eating out.

Calgary Health Region

[www.calgaryhealthregion.ca/nutrition](http://www.calgaryhealthregion.ca/nutrition)

## II d. Public Awareness Campaigns

### **Best Practices in Diabetes Prevention – Working with Ethnocultural Communities.**

**2004.** This manual highlights ways to conduct culturally competent diabetes prevention campaigns. Using educational and communication campaigns in Toronto, the project increased awareness of type 2 diabetes and its prevention among some communities that were at risk for developing type 2 diabetes. Communities included Caribbean, Polish, Hispanic, and Vietnamese.

Access Alliance Multicultural Community Health Centre  
[www.accessalliance.ca](http://www.accessalliance.ca)

**Concerned Children’s Advertisers (CCA).** This not-for-profit organization of 24 member companies, supported by 40 partner companies, uses collective resources and skills to create and implement initiatives that educate, empower, and benefit the children of Canada. Since 1990, CCA has produced more than 35 high quality television commercials to aid children in making wise media and life choices. Additionally, CCA’s national TV&ME program extends the learning potential of CCA commercials by giving teachers lesson plans and parents tips and tools to help children deal with the media and life challenges they face each day.

Concerned Children’s Advertisers  
[www.cca-kids.ca](http://www.cca-kids.ca)

**Eat Well. Be Active. Have Fun. You Can Prevent Type 2 Diabetes.** This is a public awareness campaign by the Canadian Diabetes Strategy, Health Canada. The campaign is focused on Canadian families, with an emphasis on women between 25-39 years of age. The goals are to raise awareness that type 2 diabetes is preventable, encourage families to improve the opportunities for positive lifestyle choices, and coordinate and integrate diabetes messages from all stakeholders.

The Canadian Diabetes Strategy, Health Canada  
[www.healthcanada.ca/diabetes](http://www.healthcanada.ca/diabetes)

**National Advertising Campaign.** The goal of this campaign is to motivate Canadians to be healthier and more physically active by integrating more activities into their daily lives. To learn more and to access tools for informed healthy living choices, individuals can call 1-800-OCanada and ask for health information related to activity and diabetes prevention.

Health Canada  
[www.hc-sc.gc.ca](http://www.hc-sc.gc.ca)

### **III. Useful Websites**

Access Alliance Multicultural Community Health Centre  
[www.accessalliance.ca](http://www.accessalliance.ca)

Advertising Standards Canada  
[www.adstandards.com/en/industry/index.asp](http://www.adstandards.com/en/industry/index.asp)

American Diabetes Association, Youth Zone  
<http://diabetes.org/youthzone/youth-zone.jsp>

American Dietetic Association  
[www.eatright.org](http://www.eatright.org)

BC Ministry of Health and Knowledge Network  
[www.knowledgenetwork.ca](http://www.knowledgenetwork.ca)

Canada's Physical Activity Guide for Children  
[www.phac-aspc.gc.ca/pau-uap/paguide/child\\_youth/children/index.html](http://www.phac-aspc.gc.ca/pau-uap/paguide/child_youth/children/index.html)

Canada's Physical Activity Guide for Youth  
[www.phac-aspc.gc.ca/pau-uap/paguide/child\\_youth/youth/index.html](http://www.phac-aspc.gc.ca/pau-uap/paguide/child_youth/youth/index.html)

Canadian Academy of Sport Medicine  
[www.casm-acms.org](http://www.casm-acms.org)

Canadian Diabetes Association  
[www.diabetes.ca](http://www.diabetes.ca)

Canadian Diabetes Care Guide  
[www.diabetescareguide.com](http://www.diabetescareguide.com)

Canadian Fitness and Lifestyle Research Institute  
[www.cflri.ca](http://www.cflri.ca)

Canadian Paediatric Society  
[www.cps.ca](http://www.cps.ca)

Canadian Society for Exercise Physiology  
[www.csep.ca](http://www.csep.ca)

Cancer Society of Canada: Knowledge Exchange Network  
[www.cancer.ca/ken](http://www.cancer.ca/ken)

Coalition for Active Living  
[www.activeliving.ca](http://www.activeliving.ca)

Dietitians of Canada  
[www.dietitians.ca](http://www.dietitians.ca)

Eat Well and Be Active  
[www.eatwellbeactive.gc.ca](http://www.eatwellbeactive.gc.ca)

Eating and Activity Tracker  
[www.dietitians.ca/eatracker](http://www.dietitians.ca/eatracker)

Eating Well with Canada's Food Guide  
[www.hc-sc.gc.ca/fn-an/food-guide-aliment/index\\_e.html](http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/index_e.html)

Go for Green  
[www.goforgreen.ca](http://www.goforgreen.ca)

Health Canada  
[www.hc-sc.gc.ca](http://www.hc-sc.gc.ca)

Healthy Canadians  
[www.healthycanadians.ca](http://www.healthycanadians.ca)

Healthy Living  
[www.hc-sc.gc.ca/hl-vs/index\\_e.html](http://www.hc-sc.gc.ca/hl-vs/index_e.html)

Heart and Stroke Foundation of Canada  
[www.heartandstroke.ca](http://www.heartandstroke.ca)

Joslin Diabetes Center  
[www.joslin.harvard.edu](http://www.joslin.harvard.edu)

Multicultural Health Brokers Co-Op Ltd., Edmonton  
[www.mchb.org](http://www.mchb.org)

National Diabetes Education Program  
<http://ndep.nih.gov/>

National Diabetes Information Clearinghouse  
<http://diabetes.niddk.nih.gov/>

Nutrition Labelling  
[www.healthcanada.gc.ca/nutritionlabelling](http://www.healthcanada.gc.ca/nutritionlabelling)

Ontario Council of Agencies Serving Immigrants  
[www.ocasi.org](http://www.ocasi.org)

Public Health Agency of Canada  
[www.phac-aspc.gc.ca](http://www.phac-aspc.gc.ca)

Quebec Diabetes Association  
[www.diabete.qc.ca](http://www.diabete.qc.ca)

Service Canada  
[www.servicecanada.gc.ca](http://www.servicecanada.gc.ca)

Social Marketing: Concerned Children's Advertisers  
<http://cca-kids/psa/psa.htm>

The College of Family Physicians of Canada  
[www.cfpc.ca](http://www.cfpc.ca)

WIN-Weight-Control Information Network  
[www.win.niddk.nih.gov/](http://www.win.niddk.nih.gov/)

## **IV. Glossary of Terms**

### **Active Transportation** (non-motorized transportation)

Any form of human-powered transportation. It is any trip made by an individual for the purposes of getting to a particular destination.

### **Aerobic Activity**

Any activity that causes the heart to pump harder and faster, causing individuals to breathe faster and thereby increasing the level of oxygen in the bloodstream.

### **Autoimmune Disease**

A disease in which a person's own antibodies destroy body tissues, such as the beta cells in the pancreas. This is what occurs in type 1 diabetes.

### **Blood Pressure**

The pressure exerted by blood flow on arterial walls.

### **Body Mass Index (BMI)**

BMI is defined as the weight in kilograms divided by the square of height in metres. Underweight (<18.5); Normal Weight (18.5-24.9); Overweight (25-29.9); Obese (>30).

### **Calories**

A measurement of energy provided by food. The sources of calories in the diet are carbohydrate, protein, fat, and alcohol.

### **Diabetes Mellitus**

A condition that results from the body's inability to produce a sufficient amount of insulin or to properly use insulin.

### **Diabetic Neuropathy**

A diabetes nerve disease that occurs when the cells that make up the nerves are altered in response to high blood sugar.

### **Diabetic Retinopathy**

A disease that usually occurs in people with long-standing diabetes. It is characterized by damage to the back of the eye, or retina, and other problems.

### **Familial Occurrence**

This refers to the pattern of a disease within a family. Studies have shown that type 2 diabetes is far more likely to run in families than type 1 diabetes.

### **Fasting Blood Sugar Reading**

The blood sugar level before an individual has eaten (normally between 3.5 and 7.0 mmol/L).

**Gestational Diabetes**

This develops due to a deficiency of insulin during pregnancy (between the 24<sup>th</sup> and 28<sup>th</sup> weeks) that disappears following delivery. Women who have had gestational diabetes are at a high risk of developing type 2 diabetes later in life.

**Glucose Tolerance Test**

An oral glucose tolerance test that is a standard method for diagnosing impaired glucose tolerance or diabetes. The test, given in a lab or a doctor's office measures blood glucose level in the morning before the person has eaten, as well as at regular intervals after consuming a standard dose of glucose

**Glycated (Glycosylated) Hemoglobin (HbA1c)**

A laboratory test that reflects the average glucose level over a two- to three-month period.

**Glycemic Index**

A scale that ranks carbohydrate-rich foods by how much they raise blood glucose levels compared to glucose or white bread.

**Health**

A mental or physical condition of optimal well-being and vitality that is free from disease.

**Healthy Eating**

Healthy eating encourages people to enjoy a wide range of foods and emphasizes lower-fat foods, grain products, vegetables, and fruits.

**Healthy Living**

The practices of population groups that are consistent with supporting, improving, maintaining, and/or enhancing health. As it applies to individuals, healthy living is the practice of health-enhancing behaviours.

**Healthy Weights**

Healthy weights focus on health not appearance. The weight classification system currently in use in Canada uses a body weight classification system to identify health risks associated with body weight in individuals and in populations.

**High Blood Pressure or Hypertension**

Hypertension is the medical term for high blood pressure. When the pressure remains high for a length of time, it damages the small blood vessels as well as the larger arteries.

**Hyperglycemia**

A condition where the blood sugar level is raised – a level more than 7.0 mmol/L.

**Hypoglycemia or Low Blood Sugar**

A condition where the blood sugar level is less than 3.5 mmol/L at any time.

**Impaired Fasting Glucose (IFG)**

Describes a condition in which fasting blood glucose levels are above normal (between 6.1 and 6.9 mmol/L) but not yet within the diabetic range (7.0 mmol/L).

**Impaired Glucose Tolerance (IGT)**

In this condition, blood glucose levels two hours after an oral glucose tolerance test are above normal (between 7.8 and 11.0 mmol/L) but not within the diabetic range ( $\geq 11.1$  mmol/L). People with high IGT have a high risk of progressing to type 2 diabetes.

**Insulin**

A hormone produced by the beta cells of the pancreas. It regulates the blood sugar levels.

**Insulin Resistance**

A condition where the pancreas makes insulin but the cells do not respond to it.

**Ketoacidosis**

A severe complication of diabetes that is the result of high blood sugar levels and ketones. It is often associated with poor control of diabetes or is a complication due to other illnesses.

**Modifiable Risk Factor**

A risk factor that can be changed by alterations in lifestyle or diet.

**Nephropathy**

Any disease of the kidneys.

**Neuropathy**

Inflammation or degeneration of the peripheral nerves.

**Obesity**

A condition in which an individual weighs more than 20 percent of the ideal weight for that person's age and height.

**Overweight**

A condition in which the individual weighs more than 10 percent of the ideal weight for that person's age and height. In this condition, the body mass index is equal to or greater than 25kg/m<sup>2</sup> for men and women.

**Peripheral Vascular Disease**

A disease that occurs when the blood flow to the limbs is restricted. It causes cramping, pains, or numbness.

**Physical Activity**

Any body movement produced by skeletal muscles that result in energy expenditure. It is further defined by type, frequency, intensity, and duration.

**Physical Inactivity**

An energy expenditure below 1.5 Kcal/kg/day. This level is considered equivalent to leisure activity.

**Podiatrist**

A professional who diagnoses and treats disorders of the feet.

**Prediabetes**

A condition where the blood glucose levels are higher than normal but not quite high enough to be diagnosed as diabetes.

**Prevalence Rate**

The description of the rate of a disease in a given population.

**Primary Care**

Health care delivered by family or general “front line” practitioners.

**Primary Prevention**

Includes activities aimed at preventing diabetes from occurring in susceptible people or populations. Primary prevention occurs through modifications to the environment and changing behavioural risk factors.

**Risk Factor**

A characteristic more prevalent among the people who have a particular disease or outcome than among those who do not.

**Secondary Prevention**

Covers methods such as screening to detect diabetes as early as possible in order to reverse or halt side effects. Secondary prevention is directed at the period between the onset of disease and the normal time of diagnosis.

**Sport**

A type of physical activity governed by a set of rules or customs, which is often engaged in competitively.

**Tertiary Prevention**

Any measure undertaken to prevent complications and disability from diabetes among people who already have the disease. Tertiary prevention consists of measures to reduce impairments and disabilities and to minimize the suffering associated with the disease.

**Type 1 Diabetes** (formerly known as Insulin-Dependent or Childhood-Onset Diabetes)

A disease diagnosed before age 30 that is characterized by a lack of insulin production. Individuals with type 1 diabetes require daily insulin injections for life.

**Type 2 Diabetes** (formerly called Non-Insulin Dependent or Adult-Onset Diabetes)

Usually diagnosed after age 45, it results from the body’s ineffective use of insulin.

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