

Diabetes Care in Nova Scotia

a newsletter of the Diabetes Care Program of Nova Scotia

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State of the Art

Heart and Stroke Foundation Helps Nova Scotians Recognize Symptoms of Stroke

Stroke is one of the leading causes of death and disability in Canada. The scary truth is more than 1,300 Nova Scotians experience a stroke each year; and of those who survive, more than half require ongoing assistance with daily activities. Nova Scotians are at particularly high risk of stroke because they have among the highest rates of smoking, obesity, diabetes, hypertension, physical inactivity, and elevated cholesterol levels in Canada. What is surprising is that even though a number of Nova Scotia communities have the highest rates of death due to stroke in the country, only half of us are able to identify even two warning signs of stroke.

There are five main warning signs that you may be experiencing a stroke: **weakness, trouble speaking, vision problems, headache, and dizziness**. Most people do not recognize these symptoms to be stroke-related.

When we lack this basic awareness, we often ignore vital warning signs and each passing minute puts us at a greater risk of dying or living a life compromised by stroke. The Heart and Stroke Foundation of Nova Scotia has made teaching Nova Scotians to recognize these warning signs a top priority in fulfilling their mission of preventing and reducing the occurrences of death and disability due to stroke.

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In order to fulfill the need for education on the signs of stroke, the Heart and Stroke Foundation has partnered with the Canadian Stroke Network, the Nova Scotia Department of Health (DoH), and a number of committed industry partners in the launch of a 36-week multimedia stroke campaign which was launched in December, 2004 and will continue until September, 2005. The campaign is specifically aimed at increasing understanding of the warning signs in the over 50 age group and will include intermittent television advertising coupled with an intensive public relations component (media kit distribution, print media, and print material distribution to various stakeholders including pharmacists and physicians). The message is simple—**learn to recognize the warning signs of stroke and call 911 immediately if you or someone you care about exhibits these signs**. Seeking immediate medical attention will increase chances of survival and of making a full recovery.

The campaign will be evaluated through pre-, during, and post-campaign population surveys that will help to measure the successes of the various communication tools. We are hoping to see a minimum of 10% increase in awareness of the warning signs in the target age group by November 2005. Other benefits include increased acknowledgement by public and key health care providers of stroke as an important public health education issue, development of a network to facilitate future communication, an increase in the number of ambulance calls related to stroke, and completion of a comprehensive report detailing the successes and challenges associated with this type of campaign.

Newsletter Publication Dates:

The first week of January, April, July, and October. Questions or contributions should be submitted at least 3 to 4 weeks prior to the publication date.

The Heart and Stroke Foundation of Nova Scotia's Integrated Stroke Advisory Committee is working to create a communication link between key stakeholders in the area of stroke—Doctors Nova Scotia, Pharmacies, Emergency Health Services, District Health Authorities, and the DoH.

We are also grateful to be working with Diabetes Centres (DCs) across Nova Scotia through work with the Diabetes Care Program of Nova Scotia (DCPNS) to help relay this very important message.

This is a particularly important partnership as diabetes is an independent risk factor for stroke. In fact, compared to people without diabetes, people with diabetes have two to four times increased risk of stroke. Nearly 20% of people who experience strokes are people with diabetes.

There are several factors that increase the risk of stroke in a person with diabetes. High levels of blood glucose can cause damage to the blood vessels over time (damage to the internal lining, increased lipid deposits, altered clotting mechanism, reduced nutrient flow to the vessel walls, etc.). This also applies to the vessels leading to the brain. People with diabetes are also more likely to have high blood pressure and high blood fats, both of which increase the risk of heart disease and stroke. It is important for persons with diabetes to monitor and modify risk factors that contribute to high blood sugars, high blood pressure, and high blood fats. These include healthy food choices (types and amounts), increased physical activity, smoking avoidance/cessation, stress management, and weight control.

Each DC will be provided with a kit containing helpful resources that can be used to educate patients and visitors on the warning signs of stroke. It is through this type of concerted effort with many partners that we can move forward in our journey towards generations free of heart disease and stroke.

For more information on the Stroke Awareness Campaign or for more information on the warning signs of stroke, please call 1-800-HSF-INFO or visit www.heartandstroke.ns.ca.♥

Kelly Crawford
Communications Coordinator, Stroke Awareness
Heart and Stroke Foundation of Nova Scotia

News from the Care Program

We are pleased to use this issue of the DCPNS newsletter to help launch the Nova Scotia "Stroke Awareness Campaign." Reaching our readership with news of this important campaign has far reaching implications as Diabetes Centres (DCs) have an extensive reach beyond that of individuals with a diagnosis of diabetes to those in the community at added risk. DC partnerships at the local level allow reinforcement of key messages and integration of these messages into many community activities/initiatives. We are pleased to be a part of the communication network and wish this campaign a huge success.



In this issue of the newsletter we are also pleased to present articles on Impaired Glucose Tolerance of Pregnancy (IGTP) and Support Groups. These two topics, in addition to the Use of DCPNS Registry Reports, were the basis of informal discussion sessions that were introduced at this year's DCPNS Provincial Workshop. These sessions were very well received by those who attended and their informality (brief introduction to the topic and general questions) welcomed by the discussion leaders. Thanks to those who submitted to this newsletter and a reminder to those of you who would like to share any program innovations through the newsletter, to give us a call or drop us an e-mail.

DCPNS Board and Program Staff

During the June Board of Directors meeting, we were pleased to have Dr. Murdock Smith and Marg Blakeney re-offer in the positions of Chair and Vice-Chair, respectively. During this same meeting, we also welcomed two new Board members—Vic Gouthro, representing the Nova Scotia Division of the Canadian Diabetes Association, and Lynn Edwards, representing the Nova Scotia Department of Health (DoH). We are currently seeking a representative from the District Health Authorities (DHAs) (VP Clinical) and a member-at-large from the Medical Advisors/Directors of Nova Scotia's DCs.



It is with regret that we accepted Sharon Hepburn's resignation effective early July 2005. Sharon's enthusiasm and commitment to the program will be greatly missed. We wish her well in all future endeavors.

This summer Fran Martin joins us for 12-weeks as the DCPNS Special Projects Student. Fran will work primarily on compiling the 2004/05 DCs' statistics as well as conducting literature searches and assisting in other specific projects.



Nova Scotia Diabetes Assistance Program

We are thrilled to be involved in the development and delivery of this program. This program is being developed by the DoH with the assistance of the DCPNS and CDA and is expected to launch early in 2006. Eligibility criteria will be determined by the DoH in keeping with other similar programs. The DCPNS will help coordinate the development and roll out of the program with a specific focus on the self-care component (development of related materials) and evaluation of the program effectiveness.

Privacy Policy and Related Materials

The DoH continues to work very closely with the Provincial Programs to develop Program-specific privacy policies. As we near completion of the privacy policy, we are currently finalizing a brochure for use in facilities and on the web site of each program. The brochure explains who we are as provincial programs, what personal information is collected, how the information is used and protected, patient personal information protection rights, and an introduction to the privacy policies. This brochure should be available before the end of the summer.

Canadian Diabetes Association (CDA) Diabetes Report Card 2005

The CDA is surveying the provinces and territories (P/T) for progress related to diabetes in five key areas—policies and strategies, coverage of medication and supplies, education standards and guidelines, prevention programs and activities, and surveillance activities. The final report is expected for release in November 2005 (Diabetes Month). The DCPNS has taken the lead in responding to the survey questions on behalf of Nova Scotia. The report will include the P/T survey findings as well as case studies from each P/T and the results of a survey completed by 5,000 individuals with diabetes.

Delegated Medical Function (Insulin Dose Adjustment)

Lea Leahman, a diabetes educator with experience in insulin dose adjustment, was contracted to assist in the revision process of the DCPNS insulin dose adjustment manual. Changes are currently being made to the manual by the DCPNS office staff and will be reviewed by DCPNS Medical Advisors in the near future. The revised policies and guidelines manual will reflect the 2003 Clinical Practice Guidelines and the introduction of newer insulins.

Diabetes Foot Care Round Table

The DCPNS will be working with a consultant to draft a discussion document specific to preventing foot problems in persons with diabetes residing in Nova Scotia. The consultant will work with the members of a small working group to gather ideas, concepts, recommendations, and references in support of specialty sections. Data related to lower extremity amputations (LEAs) in the province will be used to support this document.

Wait Lists and Triage

Summary feedback from the impact assessment tool has been compiled from 6 of 9 DHAs. Fifty-three percent (20 of 37) of the DCs were represented in the responses (9 full-time [FT] DCs and 11 part-time [PT] DCs). For the initial criteria, FT and PT DCs reported difficulty in meeting the Urgent Criteria (within 72 hours). PT DCs felt that discussions were required with District FT DCs to see how urgent referrals from PT programs could be seen within the designated time period. With regards to the follow-up criteria, some DCs felt that more FU (not less) was necessary. Lack of adequate clerical support was felt to be a major deficiency in many programs. Although the DCs felt that adopting triage criteria were important benchmarks, more resources (personnel and material) and more planning were cited as necessary to meet triage criteria. A summary report will be submitted to the DoH with suggestions for next steps.

Creatinine Clearance (estimated using the Cockcroft-Gault Formula) Algorithm—for Interpretation and Action

A draft algorithm, developed with the guidance of Dr. Steven Soroka, Nephrologist, has been developed to assist diabetes educators and other health providers in interpreting and acting on estimated creatinine

clearances using the Cockcroft-Gault Formula. This is now being circulated for comment along with a Frequently Asked Questions (FAQ) sheet.

DCPNS Spring 2005 Workshop (Partnership with CDA)

Many thanks to those of you who attended our one-day workshop on May 13th and to the CDA for sharing our keynote speaker (Ginger Kanzer-Lewis) and hosting the welcome reception. The overall comments for the day were positive with some concerns expressed about unnecessary topics, going over-time, and lack of time for networking/viewing displays. Please keep in mind the logistics of organizing such a day while trying to provide a varied program to meet the needs of a diverse audience. We work with our program and speakers to meet identified interest areas and in doing so set tight presentation times.

The DCPNS is discussing a partnership for its next workshop with the CDA, DoH, and others. We hope to offer our workshop prior to the CDA Expo (April 29, 2006) to enhance sharing of expertise, resources, and possibly speakers.

Care of the Elderly with Diabetes Residing in Long-Term Care Facilities

Members from this committee will meet to discuss and agree on "a look" (format) for the guidelines. Once decided, sections will be drafted in keeping with this format for review by outside committee members. These guidelines are still very much a work in progress with additional work required on some sections.

Best Practice Committee

The second draft of *Guidelines for Dyslipidemia Management* has been prepared by Brenda for internal review before discussions with the Best Practice Committee members. This committee will meet in early fall. Work also continues on the dyslipidemia patient education module (with the help of the QEII Diabetes Management Centre). Cardiovascular Health Nova Scotia (the newest provincial program) has agreed to review the module with a view to possible endorsement prior to release for use across the province.

CDA Professional Conferences and Meetings (2005)

We hope you have marked your calendar for these meetings (October 19-22, 2005) in Edmonton, AB. The DCPNS has submitted three abstracts to the conference—*Guidelines for Blood Pressure Monitoring and Education*

through Nova Scotia Diabetes Centres; Development of Triage Guidelines for Diabetes Centres in Nova Scotia; and Description of the Prediabetes Population in a Provincial Diabetes Registry.

DCPNS Registry On-Site Implementation

The DCPNS Registry is slated for installation and training at the QEII in July, with similar plans in the works for the Hants Community Hospital DC. At present, final improvements are being made to the "Indicator Report" for DCs using the Registry on-site. This report will allow individual DCs to query their own data by specified indicator. What a great way to support quality initiatives at the local level!

Forms Revision/Printing

A supply of three newly revised forms has been provided to every DC in Nova Scotia. This includes the Prediabetes Assessment Form, the Re-referral Form (for people seen more than 2 years ago), and the multidisciplinary Adult Education Checklist.

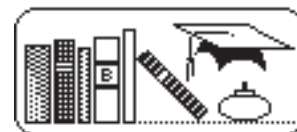
Work has started on revision to the pregnancy and pediatric multidisciplinary checklists. We plan to start revision of the mailed assessment form with input from a small group of interested educators during the summer months. The pump checklist that has been on hold will also be revised in the near future.

DC Practices Questionnaire

The DCPNS is surveying all 38 DCs to determine present practices related to guideline documents. DCs are encouraged to return their completed questionnaire as soon as possible. The results will be compiled during the summer months. ♦

Peggy Dunbar, MEd PDt CDE
Coordinator, DCPNS

New Resources



These resources are available from the DCPNS for loan across Nova Scotia. Please call (902) 473-3219 for borrowing information.

Sorry, but we have not purchased or received any resources since the last edition of the newsletter.

Pregnancy Focus



IMPAIRED GLUCOSE TOLERANCE IN PREGNANCY (IGTP)

Gestational Diabetes, diagnosed by an elevated (i.e., ≥ 10.3 mmol/L) Trutol 50-gm carbohydrate (CHO) load or 2 elevated values on a 75- or 100-gm CHO glucose tolerance test (GTT), is a well recognized, albeit controversial, entity. In the past, one abnormal value from a GTT would be considered normal and no therapy would be prescribed. More interest is presently being given to IGTP as having similar effects on the developing fetus and on maternal morbidity. We reviewed fourteen studies. The following is a summary of the results.

The definition of IGTP varies between countries. In Canada, IGTP is defined as one abnormal value during a 2-3 hour oral 75 gm or 100 gm GTT during pregnancy.¹ While this is the recognized diagnostic criteria in Canada, the American Diabetes Association (ADA) does not recognize IGTP as a diagnosis.² Other studies have used various criteria for diagnosis such as a normal fasting blood glucose (FBG) but an elevated 2-hour postprandial glucose (2-h pc) after a 100 gm GTT (Austria);³ FBG < 6.7 mmol/L and 2-h pc 9.0-11.0 mmol/L during a 75 gm GTT (Sweden);⁴ one abnormal value of a 75 gm GTT using FBG ≥ 5.0 , 1-h pc ≥ 9.2 , and 2-h pc ≥ 8.1 (Germany).⁵

Several studies found increased risks to the fetus and to the mother of IGTP even with the variety of criteria used. These risks were the same risks identified in cases of GDM, most commonly macrosomia³⁻⁹ or large for gestational age infant,^{3-6,8,9} newborn hypoglycemia,^{4,8} jaundice,⁸ prematurity,^{4,7} premature rupture of membranes,⁷ and increased NICU admissions.⁴ The maternal risks were primarily caesarean section,^{3,4} hypertension,³ and preterm delivery.^{4,7}

Risk factors for developing IGTP that were identified included obesity,⁴ previous macrosomia or large for gestational age infant,⁹ maternal age,⁴ family history of diabetes,³ and essential hypertension.⁴ Studies in our review, including an intervention cohort, showed an unexpected 19-37% indication for using insulin to reach target blood sugar control for pregnancy.^{3,9-10} In the treated obese population, risks were reduced to below the level for non-diabetic women.⁹

Although the research reviewed used a variety of methods, variables, and criteria, the information provides some conclusions that can be helpful in designing a care plan for women with IGTP. At the IWK Pregnancy and Diabetes Centre, each woman is individually assessed and treated using the following guidelines:

- 1) Women with a normal prepregnancy BMI with no risk factors are given normal nutrition guidelines for pregnancy with emphasis on having 3 meals and 2 to 3 evenly spaced snacks, including a night snack. We have found a substantial night snack, taken later in the evening, to be especially helpful to women with persistent fasting hyperglycemia. Strategies to prevent CHO loading are discussed with each patient. Keeping the breakfast meal lower in CHO has been shown to be helpful as glucose intolerance seems to be greater at this time of day. We also recommend that the referring physician retest the patient with an oral GTT in 4-6 weeks.¹¹⁻¹²
- 2) If prepregnancy BMI was above normal, a meal plan with an energy level using the BEE (Harris-Benedict equation for energy requirement) for pregnancy is developed for those requiring controlled calories.
- 3) Exercise, as appropriate for the individual, is recommended for all patients with IGTP.
- 4) Monitoring blood sugars at home is instructed for those patients for whom a meal plan is developed. Patients are asked to monitor ac/1-h pc one meal a day (alternating which meal is monitored and repeating any abnormal test the next day). Patients who have a pattern of blood sugars that indicate a need for insulin have insulin initiated without repeating the GTT.
- 5) All patients are given the same postpartum guidelines that are provided for GDM (including the DCPNS pamphlet *Can you catch diabetes? No, but it can catch you!*). Follow-up is offered postpartum; especially, for women who are obese or have such risk factors as a family history of diabetes.

The results of 2 studies that may shed more light into IGTP will soon be available. The DIGEST study (through the IWK Health Centre) and the ACHOIS study in Australia have both finished recruitment. DIGEST is primarily looking at diagnostic criteria for GDM in relation to fetal and maternal outcomes. A second arm of the study will include IGTP diagnosis criteria related to outcomes. ACHOIS focuses on outcomes of IGTP intervention versus no intervention.

In summary, it is still an open book as far as definite evidence-based practice guidelines for IGTP is

concerned; but we do have some clues that IGTP and GDM are similar in terms of outcomes and, therefore, IGTP should not be ignored. ♦

Lois Ferguson, RN CDE and
Judy Mahar, PDt CDE

IWK Health Centre, Pregnancy and Diabetes Program

References:

1. Canadian Diabetes Association Clinical Practice Guidelines Expert Committee. Canadian Diabetes Association 2003 Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada. *Canadian Journal of Diabetes*. 2003;27(suppl 2).
2. American Diabetes Association. Position Statement. *Diabetes Care*. 2004;27(suppl 1):88-90.
3. Gruendhammer M, Brezinka C, Lechleitner M. The number of abnormal plasma glucose values in the oral glucose tolerance test and the fetomaternal outcome of pregnancy. *Eur J Obstet and Gynecol Reprod Biol*. 2003;108(2):131-136.
4. Ostlund I, Hanson U, Bjorklund A, et al. Maternal and fetal outcomes if gestational impaired glucose tolerance is not treated. *Diabetes Care*. 2003;26:2107-2111.
5. Schaefer-Graf U, Kjos S, Kilavuz O, et al. Determinants of fetal growth at different periods of pregnancies complicated by gestational diabetes mellitus or impaired glucose tolerance. *Diabetes Care*. 2003;26:193-198.
6. Griffith J, Conway D. Care of diabetes in pregnancy. *Obstetrics and Gynecology Clinics*. 2004;31:243-256.
7. Yang X, Hsu-Hage B, Zhang H, et al. Women with impaired glucose tolerance during pregnancy have significantly poor pregnancy outcomes. *Diabetes Care*. 2002;25:1619-1624.
8. Langer O, Brustman L, Anyaegbunam A, et al. The significance of one on adverse outcome in pregnancy. *Am J Obstet Gynecol*. 1987;157:758-763.
9. Langer O, Anyaegbunam A, Brustman L, et al. Management of women with one abnormal glucose tolerance test value reduces adverse outcome in pregnancy. *Am J Obstet Gynecol*. 1989;161:593-599.
10. Lemieux L, Ryan E. The need for insulin in subjects with impaired glucose tolerance of pregnancy. *Canadian Journal of Diabetes*. 2004;28:196-200.
11. Neiger R, Coustan DR. The role of repeat glucose tolerance tests in the diagnosis of gestational diabetes. *Am J Obstet Gynecol*. 1991;165:787-790.
12. Ergin T, Lembet A, Duran H, et al. Does insulin secretion in patients with one abnormal glucose tolerance test value mimic gestational diabetes? *Am J Obstet Gynecol*. 2002;186:204-209

Research to Practice

OMEGA-3 FATTY ACIDS AND CARDIOVASCULAR HEALTH

Over the past decade there have been modifications in recommendations regarding fat intake and cardiovascular disease (CVD) management. Although lowering total fat intake and decreasing saturated and trans fats are still very important, there has been a trend towards replacement of saturated and trans fats with polyunsaturated fats. This shift has occurred in recognition of health benefits coming directly from unsaturated fats (except trans fats) in general and specifically from polyunsaturated fats in CVD management. The Canadian Diabetes Association 2003 Clinical Practice Guidelines for the Prevention and Management of Diabetes Mellitus in Canada recommend that "Meal plans should...include foods rich in polyunsaturated omega-3 fatty acids and plant oils."¹ The American Heart Association (AHA) also includes a recommendation for omega-3 fatty acid consumption.² The background to these recommendations is reviewed in this article.

Unsaturated fats are subcategorized into monounsaturated and polyunsaturated dependent on which fatty acids are present in greatest concentration. Polyunsaturated fats have two distinct classes - omega-6 fatty acids and omega-3 fatty acids. These fatty acids are classified as essential because they cannot be made by the human body and instead must be obtained in food sources. Plant oils, nuts and seeds, and fatty fish are rich sources of polyunsaturated fatty acids.

Omega-3 fatty acids include eicosapentaenoic acid (EPA), docosahexaenoic acid (DHA), and α -linolenic acid. The omega-3 fatty acids of particular interest in CVD management are EPA and DHA found in fish and fish oils; and α -Linolenic acid can be metabolized to produce EPA and DHA, but this conversion is modest (10-15% efficiency) and controversial. The major food source of EPA and DHA is cold water fish such as mackerel, sardines, and salmon. Plant foods and vegetable oils lack EPA and DHA. However, some plant foods such as canola and soybean oils, flaxseeds, and flaxseed oil are rich sources of α -linolenic acid.²⁻³

Omega-3 fatty acids have many cardioprotective benefits including antiarrhythmic (reduces susceptibility of the heart to ventricular arrhythmias),

antiatherosclerotic (retards plaque formation), anti-inflammatory, improved endothelial function (enhances endothelial relaxation), antithrombotic (reduces blood platelets aggregation and plasma viscosity), and mildly antihypertensive. The mechanisms of action of these cardioprotective properties of omega-3 fatty acids have not been fully explained. Omega-3 fatty acids do not lower LDL-C and provide only a small increase in HDL-C. Their effect on lipids is a reduction in fasting and postprandial triglycerides. Postprandial triglycerides are especially sensitive to chronic small intakes of EPA and DHA. This triglyceride-lowering effect applies only to EPA and DHA found in fish oils and not to α -linolenic acid.^{2,3}

The benefits of omega-3 fatty acids were first recognized with the high omega-3 fatty acids intake (whale, seal, and seabirds) of the traditional Inuit diet, the high fish intake of the Japanese population, and the considerably lower rates of myocardial infarction (MI), other ischemic heart disease, and atherosclerosis found in these populations.³ The GISSI-Prevenzione Trial was a 3.5-year study of 11,324 post MI Italian patients who were randomized to receive either 1g/day of fish oil supplements or vitamin E, both, or no treatment. In the fish oil treated group, there was a 20% reduction in cardiovascular death, nonfatal MI, and stroke; a 30% reduction in sudden death; and a 20% reduction in all fatal events. Vitamin E did not significantly lower risk of death, non-fatal MI, or stroke.⁴ No clinical trial has assessed the effect of fish oil on risk of CVD in primary prevention. The Nurses' Health Study was a 16-year prospective study of 84,688 female nurses, aged 34-59 years, and free of CVD at baseline. Results of the study revealed a significant inverse association between fish and omega-3 fatty acid consumption (2-4 times/week vs <1 time/month) and incidence of major CVD events and CVD deaths. These associations were independent of established cardiovascular risk factors and dietary factors such as fiber, trans fatty acids, the ratio of polyunsaturated to saturated fat, or differences in intake of red meat and fruit and vegetables.⁵

Dietary Reference Intake for omega-3 fatty acids has been set as Adequate Intake (AI) of 650 mg/day for healthy adults.⁶ This AI recommendation can be met through consumption of fish 2-3 times a week (with an emphasis on fatty fish), use of vegetable oils and margarines rich in α -linolenic acid (canola, soybean, and flaxseed oils), and use of flaxseed flour in food preparation. Lean fish, such as cod or haddock, have smaller amounts of omega-3 fatty acids and fried

fish from fast food establishments or frozen fish products contain minimum amounts.² High dose fish oil supplements, in general, are not recommended due to side effects; e.g., prolonged bleeding times. However, the AHA recommends that patients with CVD increase their intake of EPA and DHA to 1g/day, which may require a fish oil supplement to maintain consistency in intake.²

Omega-3 fatty acids will provide another treatment option for cardiovascular risk management. Healthcare professionals and consumers need to be aware of the benefits and ways to increase omega-3 fatty acids consumption. Further research is required in primary prevention trials as well as trials to identify other patients who could benefit and to increase understanding of the cardioprotective properties of omega-3 fatty acids. ♦

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References:

1. Canadian Diabetes Association Clinical Practice Guidelines Expert Committee. Canadian Diabetes Association 2003 Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada. *Canadian Journal of Diabetes*. 2003;27(Suppl 2).
2. Kris-Etherton PM, Harris WS, Appel LJ. AHA Scientific Statement. Fish consumption, fish oil, omega-3 fatty acids, and cardiovascular disease. *Circulation*. 2002;106(November 19):2747-2757.
3. Holub BJ. Clinical nutrition: 4. Omega-3 fatty acids in cardiovascular care. *Canadian Medical Association Journal*. 2002;166(5):608-615.
4. GISSI-Prevenzione Investigators. Dietary supplementation with n-3 polyunsaturated fatty acids and vitamin E after myocardial infarction: results of the GISSI-prevenzione trial. *The Lancet*. 1999;354(August 7):447-455.
5. Hu FB, Bronner L, Willett WC, Stamper MJ, Rexrode KM, Albert CM, et al. Fish and omega-3 fatty acid intake and risk of coronary heart disease in women. *JAMA*. 2002;287(14):1815-1821.
6. <http://www.nap.edu/books/0309085373/html/> accessed June 21/03.

News From Outside the Province



Nothing to report at this time.

Educator Sharing

SELF-HELP/PEER SUPPORT GROUP

Peer support and peer learning are important facets of diabetes self-management and patient empowerment. The complexity of diabetes management requires multiple self-care decisions that must be incorporated into the realities of daily living—family, work, and social activities. Continued peer support plays a major role in lessening the burden of diabetes self-management for people with diabetes and their families. At the DCPNS spring 2005 workshop, a pre-workshop session focused on setting up a self-help/peer support group was offered. Alice Veinotte, leader of the Dartmouth Diabetes Peer Support Group, and Nancy Price and Jane Jensen, Diabetes Centre (DC) team members, Digby General Hospital, led this informal discussion. The following is a summary of the information shared/discussed.

Understanding the Purpose of a Support Group

The purpose of a support group is to act as an additional resource for people with diabetes by providing diabetes and community resource information as well as peer support. A support group is not intended to provide direct diabetes care to an individual (but may do so in an informal/unplanned way). A support group benefits from close contact with organizations such as the Canadian Diabetes Association (CDA) and the local DC as well as members of the community and business sector, all of whom generously support the group with information/speakers. These organizations/individuals also help to spread the word about the support group and its activities.

Setting Up a Support Group

When setting up a support group, a checklist of items to consider is most helpful. This should include a clear understanding of the intended audience (target group); agreed upon purpose; potential meeting times, frequency, and location; means of advertising and notifying members about meetings and activities; confidentiality considerations; and how best to determine and meet the needs of the group members.

Meeting the Needs of the Members

In meeting the needs of members, it may be helpful to generate a list of suggested meeting topics and potential speakers. This should be shared and topics added or removed based on group interest. Topic

areas specific to diabetes self care that always generate ongoing interest include nutrition, physical activity, medications, blood glucose monitoring, staying motivated and managing behavior change, and establishing and using available support systems (family, friends, and the workplace). Experience also tells us that helping individuals understand the current health system and how to access it effectively are important aspects of self-care. The support group should also consider and plan to include a variety of special events such as potluck dinners, picnics, bowling, and even walking groups. Walking clubs in the Valley grew out of interests expressed by support group members in this area.

Finding Speakers

Speakers for the support group could include the local chapter of the CDA, the Heart and Stroke Foundation, diabetes health care professionals, grocery store dietitians/nutritionists, pharmacists, community fitness specialists, psychologists and social workers, members of exercise or walking groups, and representatives from labor relations and government—Departments of Health or Health Promotion. In our experiences, all of these people have given freely of their time and expertise as a way of contributing to the success of this type of group.

Other discussions during the informal session included the suggestion that a chronic disease support group be considered for small communities. This broader interest area might attract more people, encourage learning from each other, and expand the support system.

It is important to remember that proactive, informed consumers, well linked to each other and their communities, will be better able to care for themselves. They also will be more likely to become involved in their care through improved communication with care providers (family and health care providers) and effectively utilizing the health care system. All of this will lead to increased satisfaction and involvement in self-care management activities.

For more information on setting up a support group in your area, please contact:

- Alice Veinotte (902) 434-0975 or peersupport@eastlink.ca
- Nancy Price (902) 245-2502, Ext. 3274 or (902) 825-3411, Ext. 243
- Jane Jensen (902) 245-2502, Ext. 3274♦

Brenda Cook, MAEd PDt CDE
DCPNS Diabetes Consultant

**SENSIBLE SNACKING...
WHAT'S HOT AND WHAT'S NOT
IN THE SNACK FOOD ISLES**

*Adapted from an original article by Jessica Sharpe,
DCPNS Special Projects Summer Student*



Have you ever walked into the supermarket and felt overwhelmed with all of the new products on the shelves? Well, you're certainly not alone! Depending on where you shop, there can be up to 30,000 different products to choose from. One area of the grocery store that has seen considerable growth is the snack food isle. A trend in marketing "snack food" as "health food" has emerged. These snacks include an assortment of potato and rice based chips and crackers, which are touted as being lower in fat, baked rather than fried, or made with the goodness of whole grains and even soy. While it can be tempting to accept these package claims at face value and dive into our favorite snack with reckless (and guilt-free?) abandon, making a truly healthy snack choice requires a closer look at the nutrition label. Due to a previous lack of uniformity, deciphering the information on nutrition labels was often a daunting task for both consumers and health professionals alike. Fortunately, Health Canada has mandated that all food manufacturers use a standardized nutrition label - the Nutrition Facts table - on their products by the end of this calendar year.

Numerous manufacturers have already complied with this law, and the Nutrition Facts table can be found on many of the aforementioned snack chips and crackers.



Trans Fats

So, what should one consider when attempting to choose a healthier snack item? Hydrogenated oil and added salt are the two main culprits in turning many snack foods into calorie laden, artery clogging disasters. The detrimental health effects of hydrogenated oil and the trans fatty acids have been thoroughly exposed in the mass media in recent years and with good reason. Trans fats deliver, in essence, a heart-harming "double-wammy" to our bodies, increasing LDL cholesterol levels much like saturated fats do while also decreasing levels of

heart-healthy HDL cholesterol.¹ Many food manufacturers have been quick to respond to this negative press and have been diligently removing the hydrogenated oils from their products. Consumers can avoid choosing snacks that still contain hydrogenated oil by studying the Nutrition Facts table on the package. This new label requires manufacturers to list the amount of trans fat in the food item. Health Canada recommends that foods that are sources of trans fats and saturated fats, while also being poor sources of essential nutrients (i.e., snack chips), be minimized as much as possible.²

Sodium

Sodium, one of two major components of table salt, is found in abundance in many processed snack foods. The major adverse health effect of high sodium intake is elevated blood pressure, a risk factor for both cardiovascular and renal disease. People with diabetes often have an increased sensitivity to salt's blood pressure-raising effect.³ While an Adequate Intake for sodium has been set between 1,200 mg (for the elderly) and 1,500 mg (for young adults), it is well-recognized that most Canadians consume sodium in excess of the Tolerable Upper Limit of 2,300 mg a day.³ As processed foods, such as chips and crackers, are major contributors of sodium to the Canadian diet, a health conscious consumer must be vigilant when shopping for a snack product. The Nutrition Facts tables list the amount of sodium supplied by that food in milligrams and also provides the Percent Daily Value to allow consumers to quickly judge whether that food contains a small or large proportion of sodium. So while it is nearly impossible to choose a chip or cracker that contains no sodium, it is quite possible to use the Nutrition Facts panel to select a snack that provides a smaller Percent Daily Value of sodium.

Snacks on the Market

On a recent trip to Sobey's and the Atlantic Superstore, the nutrient values of a variety of snacks were reviewed. Three categories of snacks were compared for energy, carbohydrate (CHO), fat, and sodium content: regular chip varieties, varieties that made a claim to be "healthier" than regular versions, and low-fat versions. Refer to the table on page 10 for the results of this snack food comparison.

Chip Type	Bag Size/ Price ψ	Chips/ 20 g*	Energy**/ 20g	CHO**	Fat**	Sodium**
Regular Chips:						
Ruffles™	300g/\$2.99	8 chips	112 kcal	10g	7.2g	116 mg
Lays Wavy™	245g/\$1.99	8 chips	112 kcal	11g	7.2g	88 mg
Humpty Dumpty™	235g/\$1.99	10 chips	112 kcal	10g	7.2g	108 mg
"Healthier" Chips:						
President's Choice™ Organic Chips	142g/\$2.49	6 chips	97 kcal	12g	4.7g	120 mg
Whole Grain Sunchips™	270g/\$3.29	8 chips	104 kcal	12.8g	4.8g	84 mg
President's Choice™ Olive Oil Chips	142g/\$2.99	6 chips	98 kcal	12g	4.9g	49 mg
Skinny Sticks™ Potato Sticks	85g/\$2.29	~1 1/2 cups	93 kcal	13g	4.3 g	207 mg
Our Compliments™ Chipplers™	225g/\$1.77	14 chips	94-96 kcal	13g	4.3g	172-254 mg
Low Fat (\leq3g/serving)						
Crispy Mini's™	100g/\$1.89	11 chips	86 kcal	16-19g	2.1-2.9g	107-414 mg
Spudz Stix™	142g/\$2.79	21 chips	86 kcal	14g	2.1-2.5g	271-414 mg
Snackwells™ Potato Thins	150g/\$2.22	17 chips	90 kcal	14-15g	2.5-3.0g	135-220 mg
President's Choice™ Rice Chips	106g/\$2.49	13 chips	80-84 kcal	17g	0.8-1.4g	64-144 mg
No Name™ Rice Chips	100g/\$1.69	11 chips	77-90 kcal	14-19g	0.3-2.7g	67-306 mg
Our Compliments™ Baked Potato Snacks	160g/\$1.99	15 chips	85-89 kcal	14g	2.5-3.0g	186-245 mg
Mr. Krispers™ Rice Tortilla Chips	142g/\$2.79	14 chips	79-86 kcal	16g	1.1-1.8g	150-214 mg
Skinny™ Corn Chips	113g/\$2.29	1 1/2 cups	86 kcal	14-16g	1.4-3.6g	82-100 mg
Lays™ Baked Chips	180g/\$3.29	8 chips	80 kcal	16g	1.0g	108 mg
Rolled Gold™ Pretzels	400g/\$2.99	6 pretzels	76 kcal	16.4g	0.4g	400 mg

ψ Prices may vary depending on the store and in-store promotions.

* The serving size for each snack has been adjusted to 20g for ease of comparison.

**Range in values for energy, CHO, fat, and sodium reflect variation in the available flavor varieties.

The Results

As would be expected, there is a marked decrease in fat content as you proceed down the table from the "Regular Chip" varieties, to the "Healthier" Chips/Crackers, and eventually to the "Low Fat" varieties. One must be conscious, however, that as the fat content decreases often too do satiety levels, with people sometimes eating more of the reduced-fat versions than they would of the more satisfying regular versions. However, enjoying lower fat snack products in moderation can be a sensible way to have a treat while also following recommendations to reduce saturated and trans fat intake. Another noted trend in the table is the slight *increase* in CHO levels in the "Healthier" and "Low Fat" snack varieties; a 20g serving, or one small handful of low fat snacks, contains on average 15g of CHO. This equates to one serving of Grains & Starches from the Beyond the Basics™ meal planning system. A person who consumes considerably more than one small handful will need to be mindful of their serving size and recognize that they could be eating 3 or more Grain & Starch servings (45g CHO) in one sitting. Finally, the sodium content of the snacks range from 49 mg in a serving of olive oil chips, to a whopping 400 mg in a serving of only 6 pretzels! While consumers cannot avoid the high sodium content of some snack foods, they can compensate for it by balancing their diets with lots of fresh or non-processed foods on the days when they decide to indulge in a salty snack.

The Bottom Line

Snack chips and crackers can be a tasty *addition* to a healthy diet as long as they are not being consumed in place of nutritious whole foods that are found in Canada's Food Guide to Healthy Eating. But when the occasional craving for a crunchy snacks hits, there is no need to deny it; the trick is to make an informed decision based on the Nutrition Facts table, and select a treat that is lower in calories, fat, and sodium. ♦

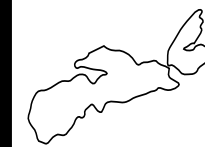
Fran Martin
DCPNS Special Projects Student

References:

1. Health Canada. (2005) *It's Your Health*. Retrieved July 7, 2005, from <http://www.hc-sc.gc.ca/english/iyh/food/transfat.html>.

2. Health Canada. (2004) *Nutrition Recommendations for Canadian – Draft Recommendations on Dietary Fat*. Retrieved July 7, 2005, from http://www.hc-sc.gc.ca/hpfb-dgpsa/onpp-bppn/comment_period_rec_on_fat_e.html.
3. *Dietary Reference Intakes for Water, Potassium, Sodium, Chloride and Sulfate*. (2004). Washington: The National Academies Press. Retrieved July 7, 2005, from The National Academies Press.

News From Around the Province



New Faces

Welcome to:

- **Cora Lee Joudrey, PDt.** Cora Lee returns to the staff of Diabetes Centres in the Eastern Shore Tri-facilities (Eastern Shore Memorial, Musquodoboit Valley Memorial, and Twin Oaks) following maternity leave.
- **Bernice Pancurea, PDt.** Bernice joins the staff of the Dartmouth General Hospital and Community Health Centre Diabetes Centre.
- **Heather Hopkins, PDt.** Heather returns to the Fishermen's Memorial Hospital Diabetes Centre following maternity leave.
- **Patricia Moran, RN.** Patricia joins the Inverness Consolidated Memorial Hospital Diabetes Centre effective August 2005.

Our best wishes to **Dorothy Frank, RN CDE**, on her retirement from the Inverness Hospital Diabetes Centre. Dorothy has been a diabetes educator for many years in Nova Scotia and her contributions have been greatly appreciated.



Certification Exam— Certified Diabetes Educator

Congratulations to all of you who successfully certified/re-certified with the May 2005 exam. If you would like to have the CDE designation added to your name for DCPNS purposes (mailings, etc.) please let the office know.

Hooray!

- Karen Macleod, Colchester Regional Hospital DC
- Janice Stanwick, Cape Breton Regional Hospital DC
- Susan Taylor, New Waterford Consolidated Hospital DC
- Maureen Topley, Colchester Regional Hospital DC
- Peggy Dunbar, DCPNS



CDA Nova Scotia Division News

Diabetes Month: As you know, November is Diabetes Month. This year the Canadian Diabetes Association will approach November with a comprehensive organization-wide approach, implementing a single theme across a wide range of programs, services, and promotional opportunities. The theme will be "Diabetes: Get Serious." Over the next few months, you will be receiving information on new awareness initiatives that will be happening during November. Stay tuned for more details.

Diabetes Expo: The Canadian Diabetes Association is hosting a Diabetes Expo on April 29, 2006 at the World Trade and Convention Centre. The Expo will provide a one-stop access to a comprehensive array of diabetes experts, information, products, resources, and speakers available under one roof. This event is designed primarily for people with diabetes and will offer more choices, information, and support for better diabetes self-management.

Diabetes Workshop: The Canadian Diabetes Association will be holding a one-day workshop for people with Diabetes on November 5, 2005 at the Dartmouth Sportsplex. A brochure will be sent out later in the summer to provide further details on the event.

Diabetes Wrist Bands: The Canadian Diabetes Association will be selling diabetes wristbands as an awareness and fundraising tool. The cost of the wristbands will be \$2 each. The color will be red to

match our logo and the words "get serious" will be written on the wristband to reflect the theme of our awareness campaign for November and "diabetes.ca" directs the wearer to our website for more information. Be on the lookout for the wristbands; and for more information on how to order them, please contact the Canadian Diabetes Association at 1-800-326-7712.

Camp Director: The Canadian Diabetes Association, Nova Scotia Region, is pleased to welcome Heather Sinclair, as Camp Director for Camps Lion Maxwell and Morton and the Leadership Training Program 2005. Heather has been involved with the CDA, Nova Scotia Region, Camping Program for many years as well as with other camps. Heather is an Occupational Therapist and will continue to work part-time in this field. Welcome Heather!

New Programs and Approaches

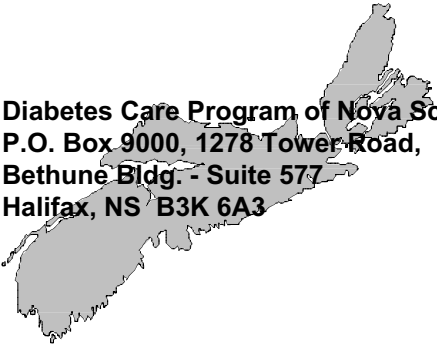
We look forward to sharing new programs and approaches with our readership. This has always been a highly valued aspect of the newsletter. Please feel free to submit to this part of the newsletter as a means of reducing our tendency to reinvent the wheel. Pick up the phone and give us a call, and we can even write it for you. How about that?♦

News From
Industry**

Laura Kirkpatrick, Regional Account Representative with Roche Diagnostics, is pleased to announce that the Just Right "Accu-Check Aviva™ System" has arrived! This system provides results in 5 seconds, requires a small sample size of 0.6 microliters of blood, has a 30-day strip expiry check, provides up to 4 test reminders per day, and has a 500-test memory capacity. And, it comes with the Multiclix™ Lancing device. Educational material to accompany the system is now available and can be forwarded directly with a quick e-mail to Laura (laura.kirkpatrick@roche.com).♦

***This information has been brought to our attention to share with educators around the province. Endorsement is not implied by appearance in the newsletter.*





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