Diabetes Care in Nova Scotia

a newsletter of the Diabetes Care Program of Nova Scotia

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State of the Art

Diabetes and Vision Loss

We are pleased to feature this State of the Art article as submitted by the Canadian National Institute of the Blind (CNIB), NS-PEI Division. This overview of diabetic retinopathy, including treatment and prevention, serves to keep this complication "top of mind." The section focused on client services provides invaluable information for both providers and those that we assist with vision loss.

According to the Canadian Diabetes Association web site, 2 million Canadians are living with a diagnosis of diabetes. As we know, every one of these individuals is at risk for vision loss. Over time, hyperglycemia can lead to both micro and macrovascular disease affecting the nervous and circulatory systems, the kidneys, or ocular system in both type 1 and type 2 diabetes. Fluctuating blood glucose levels can cause difficulties with focus and refraction, and vision may be blurred or variable. Thus, persons with diabetes should never neglect visual symptoms nor wait for symptoms to occur before taking preventive action. More severe ocular complications include cataracts, glaucoma, and **diabetic retinopathy**, which is the main threat to vision loss.

Diabetic retinopathy remains one of the leading causes of blindness and low vision in the Western World and is the third largest cause of blindness in Canada. The CNIB nationwide statistics for the period April 1, 2004 to March 31, 2005 indicated that 9.5% of new clients registered were diagnosed with diabetic retinopathy. Of the total client database representing all eye conditions, diabetic retinopathy represents 6.6% of the total number of Canadians registered with CNIB at March 31, 2005.

While not everyone who has diabetes will develop changes in the retina, the incidence of diabetic retinopathy increases with the duration of the disease and inconsistency in blood glucose control. According to recent research in Nova Scotia, diabetic retinopathy is present in 90% of the population who have had diabetes for more than 20 years. Thus, early screening and treatment of diabetic retinopathy can reduce or delay permanent vision loss.

Blindness and low vision (insufficient vision to perform daily tasks with ease) affects every aspect of a person's life: traveling independently, preparing meals, reading, obtaining an education, earning a living, socializing, and physical and emotional well being. Persons with diabetes who develop irreversible vision loss must learn special skills to live independently.

Diabetic retinopathy is characterized by changes in the capillaries that nourish the retina and is generally divided into **nonproliferative** (or background retinopathy) and **proliferative retinopathy**. Treatment depends on the stage of the disease and the absence or presence of a variety of complications.

Nonproliferative diabetic retinopathy is the most common form and includes all changes in the retina up to the development of neovascularization (the growth of new, fragile blood vessels).

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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.

Approximately 1 in 4 persons with diabetes have some nonproliferative retinopathy. Early retinal findings may include microaneurysms, tiny dot-like hemorrhages, and increased vascular permeability. If fluid leaks into the central retina, macular edema can occur, leading to blurred and distorted vision, diminished colour sensitivity, and increased light sensitivity. In advanced nonproliferative retinopathy, blood vessels become occluded, causing oxygen-deprived parts of the retina to become ischemic. Progressive retinal ischemia stimulates neovascularization on the optic disc, the surface of the retina, or the iris.

Neovascularization is the hallmark of proliferative retinopathy, the less common but more severe form of diabetic retinopathy, which affects about 1 in 20 people with diabetes. The new, delicate blood vessels easily hemorrhage and can lead to recurring retinal and vitreous hemorrhages. Contraction of the vitreous and fibrovasclar membrane formation can cause retinal detachments and severe vision loss or blindness. New vessel formation on the iris may block the normal flow of fluid within the eye leading to neovascular glaucoma. If untreated, elevated pressure can damage the optic nerve causing partial or full loss of the visual field.

Treatment and Prevention:

Diabetic retinopathy can be detected by direct examination of the dilated eye, but more detailed evaluation of the retinal vessels and location of leaking blood vessels can best be obtained by a special photograph of the eye called a fluorescein angiogram. In Nova Scotia, we are fortunate to have access to annual routine screening by eye specialists under our provincial health care system. This ensures that all persons with diabetes are afforded potentially sight-saving services free of charge.

In nonproliferative retinopathy, attention is focused on successful management of diabetes; i.e., control of blood glucose levels via diet and weight control, medication, exercise, and stress management as well as control of associated high blood pressure, cholesterol, and avoidance of smoking.

Advanced nonproliferative and proliferative retinopathies require close monitoring, even if the person is asymptomatic. When neovascularization is present, panretinal laser (photocoagulation of the peripheral retina) may be used to seal leaky vessels and destroy abnormal new ones. If central vision (sharp vision) is decreased by macular edema, prompt focal laser treatment in the macular area may improve the visual prognosis. When neovascularization on the optic nerve or diffuse retinal neovasularization is treated with panretinal photocoagulation, it has been shown to be effective in reducing incidences of severe vision loss. If bleeding into the vitreous occurs and does not clear spontaneously, specialists in vitroretinal surgery can remove the blood and old scar tissue from the eye and replace the vitreous with a clear saline solution. Laser surgery may be used to seal retinal tears, or surgery may be required for a detached retina. With successful surgery, an individual may retain some useful vision. Prognosis depends upon the severity of the detachment.

Diabetic retinopathy, if left unchecked, can result in low vision or blindness. Most of us take for granted the many simple tasks that we use our vision for on a daily basis and, therefore, do not realize how vision loss impacts our daily lives. Because of systemic affects of diabetes, persons with both vision loss and diabetes often face a cycle of special challenges that can change on a daily basis, leaving them angry, frustrated, depressed, alone, and physically and emotionally drained. (*See the side box "Familiar Scenario."*) The example may read like a tale, but is a familiar scenario to CNIB rehabilitation staff.

Available CNIB Services:

Local CNIB staff can provide vision rehabilitation services to support blind or visually impaired persons in an independent lifestyle and should be dictated by that person's unique needs. A counselor will discuss CNIB services designed to assist a person to adjust to vision loss in a practical sense and to assist a client to make contact with peer support groups for emotional support and the sharing of similar experiences. Low vision staff can provide an assessment of any remaining functional vision and can instruct clients to use special low vision devices from simple hand and stand magnifiers to electronic reading machines. Low vision devices do not correct vision but help to maximize use of your remaining vision and are based on the current level of sight and for the specific task required; for example, magnifying spectacles to enlarge print in order to read text or markings on your insulin syringe. Special telescopes and binoculars may allow someone to see intermediate or distant objects such as a computer or television screen or to read street signs at a distance. Staff can also advise on matters of task lighting, uses of color contrast, protective sun wear to reduce glare and enhance contrast, and other non-optical devices that may enhance any remaining vision. Other services can include instruction in daily living skills such as meal preparation, using the telephone, threading a needle, identifying medication or food labels, and also Braille instruction. Mobility instructors can teach individuals to move safely within the home or to travel in the

community via public transportation and by way of route training to school, shopping areas, or the workplace, etc. Library Services are available at no charge to a client of CNIB, allowing access to a variety of materials in audio and Braille formats. Technical aids staff can provide a demonstration of low tech aids like talking watches, clocks, talking blood pressure monitors, large print or Braille playing cards, and writing aids. Through training in the use of assistive devices such as large print or voice computer programs and support, return to the work force for working age clients may be possible.

Early introduction to vision rehabilitation services can lessen the impact of vision loss and assist the individual in confronting fears about blindness and in coping with the changes in their life as loss of vision progresses.

Anyone experiencing vision loss can contact CNIB directly or be referred by a health care professional or family member. Call (902) 453-1480 (Halifax), (902) 564-5711 (Sydney), or (902) 566-2580 for information.❖

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Robert Ganong, MEd, Coordinator Client Services
Marilyn Bowlby, BA, Executive Assistant
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"Familiar Scenario"

The Cycle

Imagine a person with diabetic retinopathy also coping with low vision. That person is trying to prevent any further health-related complications via a healthy diet, exercise, control of high blood pressure, and maintenance of stable blood glucose levels. He cannot read the print on food or medication labels because the print is too small, faded, or appears distorted. He cannot see whether his food is over or undercooked or that the stove dial is on a high setting. He is not aware of the burn on his finger, nor can he feel it due to peripheral neuropathy. The burn becomes infected and takes longer to heal due to impaired circulation. As he attempts to check his blood sugar levels, several expensive test strips are spoiled as a result of difficulty in putting the drop of blood in the right spot. His vision is too blurred to read the results on the glucose monitor or the tiny markings on the insulin syringe and he must guess at the dosage. He could be of working age and unable to work this past year, or perhaps he is a senior living alone with other age-related medical conditions. His social life is restricted to going to medical appointments. Medical supplies and transportation costs are taxing his already limited income, and nutritious food is no longer affordable. He tries to save on test strips by testing less often than recommended. As a result, blood sugar levels become unstable again, and eventually both residual vision and systemic complications from diabetes have worsened. *The cycle continues….*

Local Diabetes Centres can guide and support a person in maintaining a healthier lifestyle and also teach proper administration of diabetic medications and glucose monitoring. For someone with very low vision or no vision, a glucose monitor with a voice box and a drop guide may be an option to allow independent monitoring of glucose levels. These may be purchased through the Canadian Diabetes Association.

News from the Care Program

With each DCPNS newsletter, we wonder if we will have enough submissions to warrant a full issue. We are always pleased to see people willing to share the work that they do to help meet the needs of those living with or at-risk of developing diabetes. In this issue, the CNIB provides valuable insight into the services they provide to people living with low vision; Shelly Leighton, Diabetes Community Consultant, with the Union of New Brunswick Indians, shares an innovative program delivered at the local level to improve healthy food choices; and Alanna McPhee brings us an update on the *Safe Sharps Bring-Back Program*. As always, we can count on the IWK Health Centre to bring us an education tool, approach, or new information that will assist us in our practice. In this issue, Janice Smith presents a tool developed by the Diabetes in Children and Adolescents Program that can be used with schools. And last but not least, you will also find a contribution from our summer student, Fran Martin, who delves into the "determinants of healthy eating." It is very rewarding to see the interest in diabetes that these students develop during their short time with us.

From our recent survey of Diabetes Centre (DC) practices, we know that this newsletter continues to be a valued DCPNS service. We strive to keep you informed, introduce innovative/creative practice, and "plant seeds" that will continue to lead us forward in Nova Scotia. We look forward to submissions from those of you that have shared through the CDA conference, or in other venues, as a means of improving the provision of programs and services at the community level.

Program Staff

This has been a busy time with regards to DCPNS staffing changes. We are pleased to introduce/ reintroduce three staff members and one pharmacy student. Lisa Tay joins us as the Diabetes Assistance Program (DAP) Project Manager. Christine Borgel rejoins the program as part-time Administrative Secretary to the DAP Project Manager. Sarah Fleming, part-time Epidemiologist, joined the program at the end of September. We are very pleased to have these individuals working with us for the next year in these new positions. Rankin MacDonald, 1st year pharmacy student, started with us in early October as a community volunteer. Rankin will work with us until April 2006. He will pick a project of interest following orientation to diabetes.

Subcommittees

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

Work has started on formatting the sections for the guidelines manual.

Best Practice Committee

Brenda has prepared the second draft of *Guidelines for Dyslipidemia Management* for review with the Best Practice Committee members. This meeting is being planned for November. Contract work with the QEII Diabetes Management Centre continues on the dyslipidemia patient education module. We have experienced delays due to scheduling, staff illness, etc.

Pregnancy and Diabetes Subcommittee

Three sections from the 2000 version of the *DCPNS Pregnancy and Diabetes Management Guidelines Manual* have been revised and new references applied—insulin, screening, and management. These are expected to be on the DCPNS web site by November.

Creation of a Nova Scotia Diabetes Dataset

The DCPNS, DoH, and representatives from other provincial programs have been working with a consultant to determine how best to proceed in moving toward the development of a Nova Scotia Diabetes Dataset. The final report included five key recommendations that will assist in moving this work forward. Included among these recommendations is one specific to the pilot testing of a data-sharing mechanism that will see the DCPNS work with one other provincial program as well as a provincial administrative database. This is exciting work for the DCPNS as we endeavor to develop the most complete diabetes dataset for Nova Scotia.

Diabetes Assistance Program for Low-Income, Uninsured Nova Scotians with Diabetes

This program is being developed by the Department of Health (DoH) with the assistance of the DCPNS and Canadian Diabetes Association (CDA), Atlantic Division. Eligibility criteria have been determined by the DoH in keeping with other similar programs and will take into account income and family size. There will be both a deductible and 20% co-pay. The DCPNS, with the assistance of the DAP Project Manager, will coordinate the development and roll-out of the program with a specific focus on the

self-care component (development of related materials), communications, and evaluation of the program effectiveness. We are pleased to be working with Michael Vallis, PhD, on the evaluation component.

Privacy Policy and Related Materials

The DoH continues to work very closely with the provincial programs to develop program-specific privacy policies. The DCPNS Privacy Policy will be placed on the DCPNS web site in the next few weeks. The privacy brochure has been finalized and is presently being printed for use in facilities. This will also be placed on our web site with copies being provided to all DCs.

Delegated Medical Function (Insulin Dose Adjustment)

The revised version of the *DCPNS Policies and Procedure Manual for Insulin Dose Adjustment* should be available early in November.

Diabetes Foot Care Round Table

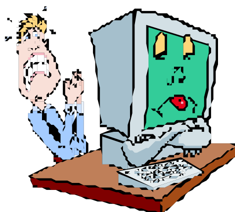
Our writer continues to work on this project with a draft expected sometime early in November.

Wait Lists and Triage

A summary report from the impact assessment conducted with all District Health Authorities has been submitted to the DoH. Following discussion with the DoH, reports will be made available to the districts and plans developed for next steps.

DCPNS Registry Enhancements

Testing of the newest version of the Registry continues with work focused on reports. Working directly with Meditech personnel at the DoH has resulted in very favorable results with regards to interface possibilities between the DCPNS Registry and this provincial system. A quality indicator report has been drafted and is just about ready for pilot testing in 2-3 DC sites.



Juvenile diabetes cases (under age 19), as reported through the Registry and by annual manual reporting, has been cleaned and validated to the end of 2004. This revised data will be placed on the DCPNS web site.

The Registry now contains in excess of 55,000 individual cases (diabetes and prediabetes cases).

The DCPNS Registry was recently installed at the QEII DMC, and discussions are underway with other interested sites.

Creatinine Clearance (estimated using the Cockcroft-Gault Formula) Algorithm

This tool has been finalized and is ready to print and distribute province-wide. This is being accompanied by an FAQ sheet to address any outstanding questions.

CDA Professional Conference and Meetings (2005)

All three of the poster abstracts submitted by the DCPNS have been accepted for the conference – "Guidelines for Blood Pressure Monitoring and Education through Nova Scotia Diabetes Centres"; "Description of the Prediabetes Population in a Provincial Diabetes Registry"; and "Development of Triage Guidelines for Diabetes Centres in Nova Scotia." We also note from the precirculated conference abstracts that the QEII Diabetes Management Centre and the QEII Case Management Coordinators are also presenting posters at the conference. If you are attending the conference, please drop by and see us during the poster displays. Your support is always appreciated.

DCPNS Annual Report

This report is now available on the DCPNS web site. Copies have been sent directly to each DC and key decision-makers in each DHA.

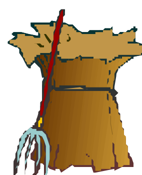
Annual Diabetes Centre/ District-Specific NDSS Reports

These reports (DC, District, and Provincial) were mailed the first week in October. We extend special thanks to Fran Martin, DCPNS Special Projects Student (Summer 05), for all her work on these reports. We would like to follow the release of this data with presentations at the District level. Please contact the DCPNS to schedule a preferred meeting date.

District-specific NDSS reports (including data to 2002/03) will be released in November 2005 in time for the business planning cycle. These reports will provide information in prevalence, incidence, complication, and utilization rates.

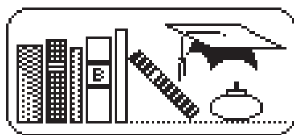
DC Practices Questionnaire

The results from this questionnaire are presently being compiled. The findings will assist with District/ individual DC discussions and allow us to focus our attention on any obvious gaps in the province.✥



Peggy Dunbar
Coordinator, DCPNS

New Resources



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

Books

- *Healthy Eating for Life to Prevent and Treat Diabetes* (2002).
- *Sweet Kids: How to Balance Diabetes Control and Good Nutrition with Family Peace, 2nd ed.* (2002).
- *Sweet Success: Guidelines for Care* (Pregnancy) (2002).❖

Practice Points

1. *A few of the people in our Diabetes Centre have recently converted from IFG or IGT to type 2 diabetes. The physician has confirmed this with a fasting or casual venous plasma glucose test. I understand that the coding of this person, for statistics-keeping purposes, is different. Would you please explain?*
   These people should be coded as a newly diagnosed (ND) type 2 diabetes case for the visit on which the type 2 diagnosis was confirmed. Remember, this is a new type of classification and the person should now be considered a type 2 case, no longer a prediabetes case. This type of information (correct coding) is very important to assist in determining conversion rates and time to conversion in this high-risk population.❖

DCPNS Registry Highlights

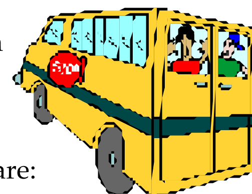
Did you know that as of March 31, 2004, 3,333 cases of prediabetes (isolated Impaired Fasting Glucose [IFG] or isolated Impaired Glucose Tolerance [IGT]) have been found in the DCPNS Registry? This represents close to 7% of all registrants in the Registry!

Pediatric Focus

SCHOOL AND DIABETES

This handout has been prepared by the IWK Health Centre Children and Adolescents with Diabetes Program for use with young children entering or returning to the school environment following a diagnosis of diabetes. It can also be used with older children if there is a need to review expectations.

Starting school for the first time or returning to school with diabetes requires some planning. Suggestions for parent(s)/guardian(s) to follow **before** their child starts school are:



Expectations for the School:

A program should be in place that includes:

- Assigning a clean, private area for blood glucose testing with sharps disposal.
- Having an emergency response program in place.
- Ensuring that staff have the knowledge re: how and when to treat low blood glucose.
- Providing a method to inform substitute teachers that a child in their class has diabetes.
- Providing assistance/supervision for younger children doing blood glucose testing.
- Ensuring the staff understand the importance of eating **all** meals and snacks **on time**.
- Providing guidelines for when to call the parent(s)/guardian(s). (For example, when a child with diabetes becomes sick at school, the parent(s)/guardian(s) should be called. If a child has high blood glucose and is not feeling well, the parent should be called.)
- Notifying the parent(s)/guardian(s) in advance of any planned school activities such as birthday parties, class trips, or sports days so that a plan can be made to include the child with diabetes safely.

Expectations for the Parent(s)/Guardian(s):

- Explain to the teacher(s) what it means to have diabetes.
- Provide information to the school for how to recognize and treat low blood glucose that is specific to the child.

- Stress the importance of treating low blood glucose immediately, and that the child must not be left alone until all low blood glucose symptoms have disappeared.
- Provide the school with supplies for testing blood glucose and fast-acting foods for treating low blood glucose.
- Inform the school when blood glucose testing should be done.
- Provide contact numbers to the school.
- Provide guidelines for when to be contacted.
- Meet with the gym teacher , if necessary, to explain exercise and diabetes.
- Consider informing school monitors and bus drivers about diabetes if the child has regular contact with these individuals.

Expectations for Older Children/Teens:

- Let teachers know that it may be necessary to check and treat blood glucose during class.
- Make sure close friends know how to recognize and treat or get help for low blood glucose symptoms.
- Wear medic alert identification.

Additional Considerations:

- Teachers are not required to give insulin or glucagon.
- Teachers are not required to do blood glucose testing, but supervised testing can usually be arranged.
- The CDA's *Kids with Diabetes in Your Care* is a helpful handout to give to teachers and can be found at: www.diabetes.ca/SectionAbout/kidswithdiabetes.asp

Diabetes care is ongoing. This will just be the beginning of continuing communication between you and the school to keep your child safe and healthy while at school.

The team would like to acknowledge the contributions of many who contributed to this (next-to-final) draft. This includes parents, children, teachers, physicians, and other health care professionals. For more information on this resource, feel free to contact Janice Smith or Sheilagh Crowley at (902) 470-7887.✥

Janice Smith
IWK Health Centre
Children and Adolescents
with Diabetes Program

Research to Practice

DETERMINANTS OF HEALTHY EATING

Diet and poorly controlled type 2 diabetes – what affects people's ability to follow diet recommendations?

Imagine this hypothetical scenario: Linda, a 42-year-old woman, has been attempting to control her type 2 diabetes through diet for the past year. Linda's diabetes care team has provided her with scientifically sound and consistent messages about healthy eating, along with encouragement and support. Despite everyone's best efforts, Linda has yet to shed the extra pounds required to achieve a healthy body weight. Even more disheartening are the results of Linda's latest blood work. A frustrated Linda concedes that she was unable to regularly adhere to the dietary advice provided to her. A concerned diabetes care team is left wondering what they could possibly have done differently to empower this woman to modify her diet for the sake of her own health. After all, for Linda to manage her diabetes, it would be as *simple* as making some smart food choices, right?…

Healthy Eating Can be Hard to Swallow:

The above example illustrates that making dietary adjustments to control diabetes is often a daunting task. In fact, a recent study noted that a diet aimed at weight loss in people with diabetes was viewed as being similarly burdensome to taking insulin.[1] Even a moderate diet plan was perceived as being more invasive than having to take oral agents to control diabetes.[1] This phenomenon, however, is certainly not exclusive to individuals who have diabetes. After all, the rate of obesity in Canada would not have doubled (and in some age groups, tripled!) in the past 25 years[2] if making consistently healthy food choices were always easy. Human nature may prompt us to cast judgment on those who appear to be *unwilling* to eat healthfully; especially, considering the complications associated with poorly controlled type 2 diabetes. People may be labeled as noncompliant or difficult, while caring health professionals may feel as though they have failed their patients. To truly understand people's eating habits, however, one must consider the myriad of factors that influence food choices in the North American culture.

Determinants of Healthy Eating in Canada:

Most people recognize that personal food preferences, or simple likes and dislikes, will influence what a person chooses to eat. Personal food preferences, however, are but a small component of what shapes our eating patterns. A recent supplement to the *Canadian Journal of Public Health* outlines two overarching determinants of healthy eating in Canada: *individual determinants* of personal food choices and *collective determinants*.[3] A brief synopsis of the determinants of healthy eating in Canada, as related to diabetes self-management, follows.

Individual Determinants of Personal Food Choices:

The individual determinants of personal food choices include the aforementioned personal food preferences. Also included here are physiological influences, nutritional knowledge, psychological factors, and individual perceptions of healthy eating.[3] A person's knowledge of nutrition can certainly impact the foods that they choose to eat, and a diabetes program can disseminate relevant nutrition information to individuals with diabetes. However, a person newly diagnosed with type 2 diabetes may have numerous psychological factors that may oppose their better sense to eat well. Feelings of depression or anger may prompt them to consume excessive amounts of food for comfort. Being in denial about one's diabetes may result in the false perception that a dietary intervention is unnecessary or redundant. In both of these instances, all of the nutrition information in the world will be insufficient to elicit the desired outcome of healthful eating. The psychological issues must first be addressed before a person can attempt a lifestyle change.

Collective Determinants of Healthy Eating:

The collective determinants of healthy eating include all of the interacting environmental factors that influence personal food choices. Included here are factors in the economic, interpersonal, and social environments.[3]

- The economic environment has immense implications on personal food selection in Canada, where the food industry is a huge money-making business. Less healthy foods are aggressively marketed on television and beyond, and vending machines have made their way into school and workplace cafeterias. With the proliferation of convenience foods and fast food outlets, it becomes increasingly difficult for people to resist the temptation to routinely reach for less healthy foods.
- The interpersonal environment includes the influence that family and peers have on food choices. Some people with diabetes may have supportive families who encourage them to adhere to their new eating plans. Others may have a circle of friends who always mix social time with excessive eating and drinking.
- Of close relation, is the social environment, where food is eaten not only to sustain life but for its cultural and symbolic implications.[3] The rapid pace of our lifestyles has caused us to place considerable value on fast foods, and many now turn their nose to the traditional home-cooked meal. The ill effects of our current social environment are evident when a person expresses that they do not know how to cook healthy meals because they have always relied on fast food.

A Closer Look:

Upon revisiting Linda and her "unwillingness" to manage her diabetes through dietary intervention, we can see that there is more to her story than meets the eye. A thorough and ongoing assessment reveals that Linda is dealing with the recent death of her mother to breast cancer. Therefore, she has had little desire to focus on her own eating habits (psychological factor). Meanwhile, her two young children have *not* been receptive to any changes in family meals (interpersonal environment). They have also continuously demanded take-out from a popular restaurant advertised on the after-school television hour (social & economic environments). In addition, Linda does not own an automobile and must do the majority of her grocery shopping at the nearby corner store (physical environment) where high costs prevent her from purchasing many fresh foods (economic environment). Surely, the determinants of healthy eating are influencing Linda's ability to manage her diabetes, despite the excellent individualized nutrition education provided by her diabetes care team.

The Solution:

What remains to be seen is what should be done to encourage Linda to gain control over her eating habits and her health. While Linda needs to accept responsibility for her own choices and actions, her health care team can assist with exploring these real-life barriers with her.

Together they can establish realistic short- and long-term goals that Linda can work towards achieving. However, the solution also involves external change. Surely, the development of healthy public policy would allow Linda, and all those in similar situations, to achieve healthy eating with less personal hardship. For instance, public policy banning the advertising of nutrient deficient foods to children could be established nation-wide. New policies have vending machines eliminated from schools; why not have them removed from workplaces as well? Furthermore, income support must be monitored to ensure that it is sufficient for people to purchase the components of a healthy diet.[3]

All told, individuals must strive to live as healthfully as their personal circumstances permit. However, only through collaborative action and healthy public policy will the collective environment positively influence the eating habits of all Canadians.❖

Fran Martin
DCPNS Special Projects Student

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KUDOS!

Great to see the QEII Diabetes Management Centre gain national notoriety with the September issue of the *Canadian Journal of Diabetes Care* 2005;29(3) - not one, but two publications!

- ***Linda Scott*** was the primary author along with Michael Vallis, Anne Murray, and Robin Latta on a paper titled "Transition of Care: Researching the Needs of Young Adults with Type 1 Diabetes" (pages 203-210).
- ***Michael Vallis*** was the primary author along with Irene Higgins-Bowser, Lynn Edwards, Anne Murray, and Linda Scott in a team-driven study titled "The Role of Diabetes Education in Maintaining Lifestyle Changes" (pages 193-202).

Educator Sharing

Choosing Nutritious Foods and Keeping Active is the Path to Better Health

HEALTHY PIK PROGRAM AT ST. MARY'S SUPERMARKET

The ***Healthy Pik Program*** is a community-based program at St. Mary's First Nation in New Brunswick. The overall vision of the program is a healthier community based on more nutritious food choices and increased physical activity, which will ultimately lead to prevention of a variety of chronic illnesses including diabetes. As is commonly known, the incidence of type 2 diabetes within the Aboriginal Canadian population is at epidemic proportions; and, unfortunately, there is little support for the day-to-day lifestyle choices that community members make. This ultimately affects their health and the health of our future generations. Through consultations with several community members over the past few years, it was becoming increasingly clear that a lack of information pertaining to food choices was a concern of the people trying to manage their diabetes. In addition, health staff identified that there needed to be an increased awareness as to the benefits of physical activity in the lives of community members that, in combination with healthier food choices, would lead to improved overall community health.

The ***Healthy Pik Program*** is a supermarket program that assists the consumer in making healthier food choices while shopping for groceries. Registered dietitians and diabetes nurse educators surveyed the products on the grocery shelves to determine whether or not each product met the criteria set for the program including:

- **Low fat healthy choices**: Products that contain less than 3 grams of fat per serving.
- **Source of fibre choices**: Products that contain a source of fibre – at least 2 grams per serving

A sticker that is placed on the product label on the grocery store shelf identifies items that are classified as

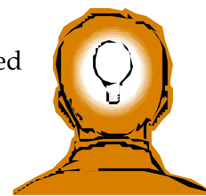
a "Healthy Pik" by their fat and/or fibre content. An apple icon is used to identify those choices that are low in fat, and a wheat icon is used to identify those choices that are a source of fibre. In addition, information brochures and other forms of literature are available to the consumer to increase awareness of healthy food choices, healthier ways of eating, and the importance of regular physical activity. Furthermore, regular blood pressure and, potentially, blood glucose screening clinics are planned for the future in the lobby of the supermarket. These services will facilitate the identification of those who may be at risk for developing diabetes as well as providing assistance for those already living with diabetes in their efforts towards self-management.

The project planning was a comprehensive effort led by the community health nurse, the ADI Diabetes Community Consultants, and grocery store management. The vision of the program came from a similar project in Sandy Lake First Nation, and ideas to make the program easier for developers and staff continue to be ironed out. Although every program has its initial snags to work out, Community Health Nurse, Shelley Landsburg, feels that this program is valuable to the St. Mary's First Nation and is hopeful that the partners involved will continue to assist to ensure the program's sustainability.

The official launch of the ***Healthy Pik Program*** was held February 11, 2005. The program developers, grocery store staff, and students from the community school celebrated this fun and interactive day. Nursing students from the University of New Brunswick were on hand to offer blood pressure screening, and a wonderful door prize was offered at the end of the morning. Unofficial verbal evaluations of staff, management, and consumers indicate that the ***Healthy Pik Program*** is a worthwhile and successful initiative. The next time you visit St. Mary's First Nation, drop by the St. Mary's Supermarket to check out the ***Healthy Pik Program*** – you'll be glad you did!❖

Shelley Leighton, BN RN CDE
Diabetes Community Consultant
Union of NB Indians

CHRONIC DISEASE MANAGEMENT - BRINGING IT HOME…



Have you ever come away from conferences where you felt rejuvenated and reenergized with new ideas, and ready to take on the world? Well, I just attended such a conference and want to share this with you.

Toward the end of September, I was fortunate to attend a conference titled *Global Perspectives on Chronic Disease Management: The Calgary Conference 2005.* There was a small contingency from Nova Scotia each looking for ideas and information to help inform their areas of practice—DoH and District representatives, Primary Health Care Coordinators, specific Program Managers, and community health planners/researchers. Some were looking for guidance in the required system change to implement chronic disease management in a world dominated by acute care (is this more than just a buzz for the present?), others were looking to enhance present primary care practice, and others were looking for concrete examples (success stories) of how to move toward optimal Chronic Disease Management (CDM) in a more integrated, collaborative way. Me, I was looking for the big picture and how diabetes presently fits in this world of CDM. I wanted to see what needs to be done differently and how we can contribute our expertise and experience to this very exciting movement. I wanted to truly understand CDM as espoused by the "experts."

We heard a lot of people speak positively of the Wagner Chronic Care Model (DCPNS Newsletter April 2004:14[2]:1-3) and adaptations thereof. During this conference, we learned from experiences in the UK, Australia, Singapore, the US, South Africa, Canada, and the WHO. We looked into the future of technology (virtual clinics), as it will impact delivery of care for generations to come. Among others, we looked at the needs of seniors and people with multiple comorbid conditions; we explored mental health, HIV Aids, COPD, asthma, and diabetes. We learned of the need for drastic change before chronic diseases swamp the health care system. And we also addressed self-management as it has never been addressed before. We learned of the need for peer-to-peer counseling, for programs focused on self-efficacy, etc. These are not to replace existing programs but to complement and meet the identified needs of people living with chronic disease. Successful models already exist in BC and AB.

During this 2.5-day program, 128 concurrent sessions were offered across 4 theme areas (disease management, self-management, delivery system design/decision support, and policies/partnerships). Each theme area was drawn from Wagner's Chronic Care Model. Many exciting pilot projects are underway and the enthusiasm is contagious. The only complaint was not being able to attend them all. From the group representing Nova Scotia, 2 current Nova Scotia projects were presented—*Managing Stoke in a Rural Area* and *Implementation of the PACE Physical Activity Counselling Program in the Colchester Regional Hospital Diabetes Centre*. (Upcoming issues of our newsletter will highlight information on these two Nova Scotia projects.)

It did not take long before common themes started to emerge—partnerships, small steps, leading by example, role of champions, expanded teams, patient-centered programming, innovation, and creativity. We need to look beyond what we do day-to-day to what our patients (health care consumers) really want—one stop shopping, more time to be heard and really listened to, treat as a person not a disease…

As I wrapped up my thoughts on the conference, I offer the following "pearls":

- Diabetes is currently a leader among chronic disease management but needs to share its experiences.
- Diabetes needs to embrace integrated delivery models while keeping and building on its expertise.
- Diabetes needs to explore technology, patient-centered approaches, and expanded teams.
- Diabetes needs to partner. There are many willing partners wanting to work with us.
- Diabetes in Nova Scotia has a lot to share and contribute while learning from and along with others.

With these "pearls" in mind, the DCPNS will be notifying Diabetes Centres in the weeks to come about three small DCPNS grants that will be made available on an annual basis to encourage movement in the above areas. This had been discussed and approved almost 2 years ago by the DCPNS Board of Directors. It is our hope that these grants provide much needed time to build partnerships, look at innovation, and move toward more integrated community-based programming.✥

Peggy Dunbar
Coordinator, DCPNS

SAFE SHARPS BRING-BACK PROGRAM TAKES ON A NEW LOOK!

Resource Recovery Fund Board (RRFB) Nova Scotia is pleased to introduce a new look for the *Safe Sharps Bring-Back Program*. The new brochures and posters are more colorful and eye catching. In addition, the new promotional materials feature actual photos of needles, lancets, sharps containers, etc. The new pamphlets and posters are being distributed to pharmacies (through the Pharmacy Association of Nova Scotia [PANS}), DCs, waste management educators, and other stakeholders.

This is the first revision to the *Safe Sharps Bring-Back* pamphlet and poster since the program was launched in 2001. Although the program has a new look, it operates the same. Residents can visit a pharmacy to pick up a free Safe Sharps container. Once filled, the sharps user returns the container to the pharmacy for safe disposal.

Safe Sharps Bring-Back Partners Contribute To Its Success!

The Safe Sharps Bring-Back Program continues to be a tremendous success due to the partners that have supported the program. RRFB Nova Scotia has been instrumental in developing educational materials related to the program. Municipalities have been promoting the program to their residents through newspaper ads, newsletters, cable TV, and visits to some pharmacies.

The Canadian Diabetes Association and PANS continue to support the *Safe Sharps Bring-Back Program* through the distribution of sharps containers and pamphlets across the province.

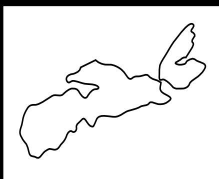
Nova Scotia Environment and Labour continues to play a key role and is currently working with PANS and sharps producers to ensure the program is sustainable in the future.

All stakeholders should be very proud of a program that has significantly reduced the risk of sharps punctures at recycling facilities. The program needs the continued support of all involved to ensure the safety of workers in the waste management industry.

For more information, visit the web site (www.rrfb.com) or contact Alanna McPhee, Education Officer, RRFB Nova Scotia at (902) 897-3252 or amcphee@rrfb.com.✥

Alanna McPhee, Education Officer
RRFB Nova Scotia

News From Around the Province



New Faces

Welcome to:

Janice Knapp, RN. Janice joins the staff of the Valley Regional Hospital DC.

Our best wishes to **Joan Coldwell, RN CDE,** on her retirement from the Valley Regional Hospital DC effective the end of September 2005. Joan has been a diabetes educator for many years, has worked with the DCPNS in a seconded position as Diabetes Consultant, and has actively contributed to many local and provincial diabetes initiatives. Best wishes, Joan!

Certification Exam—Certified Diabetes Educator

Congratulations to those 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!

- Esther Gould, RN CDE, Cumberland Regional Health Centre DC
- Chris Swan, RN CDE, Cumberland Regional Health Centre DC
- Sue Walker, PDt CDE, Cumberland Regional Health Centre DC
- Kathleen Bayliss-Byrne, PDt CDE, Canadian Forces Health Services Centre-Atlantic, DC
- Shawna Boudreau, RN CDE, QEII Diabetes Management Centre

Canadian Diabetes Association (CDA) Nova Scotia Division News

Diabetes Month:

November is Diabetes Awareness Month and the CDA is planning a comprehensive campaign to raise awareness about diabetes.

This year's theme is "Diabetes. Get Serious." This theme is meant to inform Canadians about the seriousness of this condition. The message is adaptable to both prevention and diabetes management. Here in Nova Scotia, the CDA has a lot of activities happening in November including the following events:

Blitz Day:

Tuesday, November 1, 2005 will mark the CDA's first-ever Blitz Day to kick off Diabetes Awareness Month. Volunteers will be situated in high traffic locations in several cities and towns throughout the province handing out cards encouraging individuals to get serious about diabetes, and to contact the CDA for additional information. If you are interested in volunteering to be a part of Blitz Day in your community, please contact the CDA.

Educational Events:

- **November 5**
  Diabetes Take Charge Workshop (Dartmouth)
  Diabetes Awareness Day (Cheticamp)
- **TBA**
  Do You Know Your Diabetes ABCs
  (Halifax Office)
- **TBA**
  Diabetes Information Session (Yarmouth)

For more information about these events, contact the CDA at 1 (800) 326-1722.

Diabetes Expo:

Planning for our Diabetes Expo on April 29, 2006 at the World Trade & Convention Centre is going really well. The Expo Committee has chosen Drs. Ian Blumer & Michael Vallis as our two plenary speakers. The final selection of breakout sessions and "Ask the Expert" Booths has yet to be determined. The brochure will be distributed early in the New Year. If you are interested in being a presenter or manning an "Ask the Expert" Booth, please contact the CDA at 1 (800) 326-1722.

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?

- **The QEII Diabetes Management Centre Prediabetes Program** (package includes a modified version of the video), as shared during the DCPNS Spring2005 Workshop, will be available for distribution/sale in January 2006.

Please contact Irene Higgins-Bowser, Team Leader, in January for more information about content and cost (902) 473-3773.

Trudy Murphy, Diabetes Representative, Sanofi-Aventis, is pleased to announce that LANTUS® is available in Nova Scotia pharmacies. LANTUS® is an insulin analogue that is indicated for once-daily subcutaneous administration in the treatment of type 1 or type 2 diabetes mellitus in patients over 17 years of age who require basal (long-acting) insulin for control of hyperglycemia. This company also produces Avapro®/Avalide®.

In addition, three new resources are now available upon request:

- Patient resource – *Understanding Your Diabetes, The Pocket Guide to Dining Out*, and the laminated place mat (*Health Food Guide for People with Diabetes*).
- Healthcare Professional resource – *Microalbuminuria: A Physician Handbook* and *Diabetes Risk Today* (a newsletter) – Glycemic Control in Patients with Diabetes. This specific issue of the newsletter is being distributed by Sanofi-Aventis representatives.

Trudy is very pleased to return to Nova Scotia and have the opportunity to serve you as your Diabetes Representative. Should you have any questions regarding LANTUS®. Trudy may be contacted at 1 (800) 589-3383, ext. 6533.

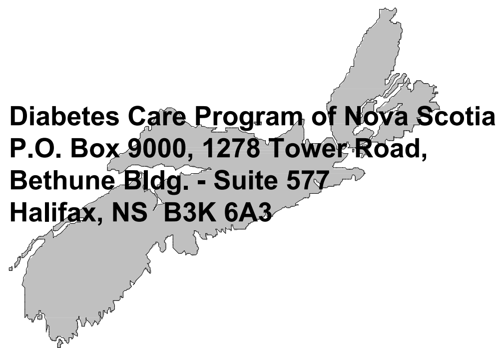
***This information has been brought to our attention to share with educators around the province. Endorsement is not implied by appearance in the newsletter.*

Check out the following **"Doing Better: Tools for Diabetes Care."** These are all part of a new initiative of the American Diabetes Association (ADA) that provides practical tools for improved diabetes management:

- A **PDA-based version of the ADA clinical practice recommendations** is available at: http://www.diabetes.org/for-health-professionals-and-scientists/cpr.jsp
- An on-line walking tracker, **Club Ped**, that enables users to record walking milestones and provide fun and engaging motivational experiences can be found at http://www.diabetes.org/ClubPed
- A web-based Health Risk Assessment tool, **Diabetes PHD** (personal health decisions). It can be used to explore the effects of a wide variety of health care interventions including losing weight, smoking cessation, and taking certain medications. This risk assessment tool allows the user to create a personal health record—the more information entered the more complete the profile (height, weight, cholesterol levels, blood pressure readings, last dilated eye exam, current medications, A1C value, etc.).

"In a short time, **Diabetes PHD** will determine a personalized results overview for you, showing your current risk for diabetes, heart attack, stroke, kidney failure, as well as foot and eye complications. By changing certain variables in your profile, like stopping smoking, losing weight, taking ACE inhibitors, getting a regular foot exam etc., you will be able to see how making these changes would affect your future health." Go to http://www.diabetes.org/diabetesphd

Source: *ADA Professional Section Quarterly, 2005*



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