

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 PREDIALYSIS/EARLY RENAL CHANGES: ARE WE DOING ENOUGH TO DETECT AND PREVENT?

"The absolute number and proportion of kidney failure cases caused by diabetes is expected to rise dramatically as the number of people with diabetes doubles over the next decade because of an epidemic of obesity."¹ Dialysis patients and kidney transplant recipients with diabetes have higher mortality and morbidity rates than non-diabetic counterparts. These two statements underscore the need for early identification and treatment of diabetic nephropathy. Aggressive management is needed to prevent the onset and delay the progression of diabetic kidney disease.

In the July issue of this newsletter, we focused on the need for the identification and management of hypertension. The January 2004 issue will address the management of dyslipidemia. These messages are of paramount importance in our quest to prevent the kidney injury that precedes diabetic nephropathy. Primary prevention includes antihypertensive therapy (even in the presence of normal albuminuria and kidney function),

optimal blood glucose and lipid control, as well as smoking prevention/cessation. In the presence of diabetic nephropathy, the strategies remain much the same with even lower blood pressure targets that often require multiple antihypertensive medications as well as dietary and other life-style modifications.

The following is an abridged version of a consultation document prepared for the DCPNS Complications Prevention Roundtable discussion held in June 2003. We welcome your feedback and insights into how we can best implement the strategies outlined below.

Diabetic nephropathy is the most frequent cause of end-stage renal disease (ESRD), and in recent years, the number of persons with diabetes entering renal replacement therapy has dramatically increased. In Nova Scotia, the number of incident ESRD patients starting dialysis increased by 88% (92 to 173 total cases) between 1991 and 2000.² Within the same time period, new cases to dialysis with a primary diagnosis of diabetes increased by 130% (22 to 51 total cases).² In our most recent year (2000), people with a primary diagnosis of diabetes accounted for 29.5% of all new cases to dialysis.² This is a decrease from the high of 35.5% recorded in 1997.² Patient survival after the start of dialysis is poor, most commonly due to cardiovascular morbidity and mortality.

The magnitude of the problem has led to numerous efforts to identify risk factors for cardiac and renal disease and implement preventive and therapeutic strategies at earlier stages.

To reverse the trend of people with diabetes progressing to ESRD, there are two main areas that must be addressed:

1. Identify individuals at high risk for cardiac and renal disease and intervene more aggressively. Risk factors include:
 - Family history of hypertension or kidney disease.

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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.

- Smoking.
 - Hypertension.
 - Dyslipidemia.
 - Decreased kidney function.
 - A1C > 8.5%.
 - Duration of diabetes: type 1, > 10 years; type 2, > 5 years.
 - High-risk ethnic groups.
2. Work with the primary care physicians and Specialists to ensure that established treatment targets (blood pressure [BP], glycemia, and lipids) are realized.

Specific Recommendations with Regards to Identification and Management:

1. Measure specific parameters at the first visit to determine risk:

- BP.
- Kidney function.
Serum creatinine should be measured annually even though it is not the best measure of kidney function due to the influence of age, gender, and muscle mass.

A better measure of renal function is the Glomerular Filtration Rate (GFR) which can be determined in several ways:

a. Cockcroft-Gault Formula.³
This formula uses serum creatinine to calculate creatinine clearance as a surrogate marker for the true GFR.

$[(140 - \text{age}) \times \text{weight in kg}] / \text{serum creatinine}$
If male gender, multiply by 1.2.
This calculation could be done by hand calculator, PDA, or by a database.

b. Couchoud Cut Points.⁴
These points equate levels of serum creatinine to true GFR as determined by the gold standard of inulin clearance.

Three levels of creatinine clearance can be used as quick reference values that can be quite useful and do not require any calculation:

		Serum Creatinine (Jaffe Method)	
Inulin Clearance		Men	Women
<80ml/min/1.73m ²	Mild Kidney Disease	115	90
<60 ml/min/1.73m ²	Mod. Kidney Disease	137	104
<30ml/min/1.73m ²	Refer to Nephrology	177	146

- Urinalysis.
All individuals with type 2 diabetes should have a routine urinalysis done at diagnosis and annually thereafter to check for proteinuria and hematuria.
 - A urinalysis with hematuria requires further investigation.
 - A positive dipstick for proteinuria should be followed by either a 24-hour urine or random urine for Protein/Creatinine ratio to quantitate total daily protein excretion.
 - Microalbuminuria (MAU) testing should be done in the following situations **if routine urine dipstick is negative for protein:**
 - * In all persons with type 1 diabetes.
 - * In all persons with type 2 diabetes in the absence of proteinuria, hypertension, or other risk factors for cardiovascular disease.
- Lipid profile.
- Smoking history.
- Sodium (Na) intake.
- Family history of DM or kidney disease.

2. Manage BP:

- a. Restrict Na to 2 g NaCl per day.
- b. BP target is 130/80 mm Hg in general, but 125/75 mm Hg if more than 1 g of proteinuria.
- c. Use of ACEi or ARB as first line antihypertensive agents. The second medication should be a diuretic followed by additional medications as needed to reach the target BP.
- d. Refer to local internist if BP not at target despite three medications and Na restriction.

3. Identify patients that should be referred to nephrology:

- a. CrCl < 30 ml/min measured on at least 2 occasions.
- b. Atypical features: hematuria, systemic disease, rapidly rising Cr, or increased Cr > 30% after ACEi or ARB.
- c. Nephrotic syndrome: > 3.5 g/day proteinuria with or without low albumin, increased cholesterol, edema, or hypertension.

4. Engage in patient education (focus on empowerment):

- a. Explain Na restriction.
- b. Explain reason for BP control (short and long-term risks); symptoms; targets for BP; medication actions and need for medication persistence; etc.
- c. Reinforce life-style modifications (smoking cessation, stress management, and regular physical activity).

5. Engage in healthcare professional education:

- Deliver needs based education through a variety of delivery methods.

6. Identify and establish community-based approach to acceptable referral practices:

- A local interest (internist) close to Diabetes Centre could act as a resource for local GPs prior to Nephrology consult.

These recommendations challenge us as health care professionals to work as a cohesive, collaborative team at the community level to markedly reduce the risk of diabetic nephropathy. We have a huge role to play in educating both patients and professionals as we move forward. Let's do it together and lets do it now!▲

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INFLUENZA VACCINE

Remember to remind all people with diabetes to have their annual flu shot!

For more information on the influenza vaccine, contact your local public health office or visit the following web sites:

www.gov.ns.ca/reports.htm
www.influenza.cpha.ca

News From the Care Program

I've heard some say that September signifies the start of a new season. With the renewed vigor and enthusiasm that follows well-deserved vacations, we seem ready to take on the world. Just as January signifies a new year with resolutions and new directions, September affords us the same "fresh start." The DCPNS looks forward to a number of new projects and some "fresh starts" that are now underway. We started our "new season" with a clear look at our internal and external challenges and opportunities and asked "How can we build on our strengths?" We will be extending our reach as we now look for and share best and better practices across the province. We have access to a vast array of experiences, growing evidence, and supporting data that can help us pinpoint programs and specific approaches that we and others can learn from.

We look forward to the sharing that our newly-formed "Best Practice Committee" will foster and with it the continued growth of quality care delivery in Nova Scotia. We hope you'll join us with the same sense of excitement that we feel as we move into this "new season."

Subcommittee Reports

Diabetes in Children and Adolescents Subcommittee.

The Children and Adolescents with Diabetes Management Guidelines Manual, 2nd edition, is now complete and distribution across the province is underway. A **Telehealth session is being planned for November 19 from 4 to 6 p.m.** This session is open to healthcare professionals who work in inpatient, outpatient, and community settings with an interest in the management of children and youth with diabetes. Individual committee members will highlight new content with an emphasis on changes that impact practice. This manual will be displayed and promoted during the upcoming Canadian Diabetes Association (CDA) national conference. Order information is available on the web site.

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

A needs assessment for use with Long Term Care facilities is being finalized with the assistance of the Long Term Care Advisors, DoH. This assessment will assist in determining what standards and guidelines are presently in place and where we need to focus our energies. At present, members are being recruited for this soon-to-be formed DCPNS subcommittee. If you have an interest in lending your expertise to this committee as either a participating or consulting member, please contact Sharon Hepburn at (902) 473-3208 for more information.

Best Practice Committee.

The DCPNS Board of Directors recently approved the Terms of Reference for this new subcommittee. The purpose of this committee will be “to determine, develop, recommend, and evaluate best practice approaches for Nova Scotia Diabetes Centres (DCs).” Specific activities include determining a range of DC “best and better” practices supported by provincial data and other evidence; facilitating the sharing of best practice approaches among diabetes educators and others; developing, recommending, implementing, and evaluating best practice approaches for Nova Scotia DCs; encouraging applied research in DCs to address best practice questions/issues. Members will be invited from each of the District Health Authorities with an emphasis on participants who demonstrate an interest in making decisions based on evidence (i.e., those using the DCPNS Registry System for data collection, those with best practice indicated during auditing/benchmarking processes, or those with a recognized area of expertise/interest). Additional members representing different disciplines/professions will be selected depending on the project at hand. We will be seeking nominations with approval from individual districts. If you have a specific interest in joining this committee or contributing in other ways, please let me (Peggy) know.

Delegated Medical Function (DMF) (Insulin Dose Adjustment)

A total of 6 Districts have received District Medical Advisory Committee approval for insulin dose adjustment as a DMF. Congratulations to the following diabetes educators who have recently completed the certification process: Janice Knapp (IWK Health Centre); Nancy Price (Soldier’s Memorial Hospital and Digby General Hospital); Pat DeMolitor (Queen’s General, Roseway, and Fishermen’s Memorial Hospitals); Joan Coldwell and Bev Harris (Valley Regional Hospital); Tia Haley and Michelle Barnes (Fishermen’s Memorial Hospital).

An abstract submitted to the CDA national meeting and professional conference being held in Ottawa in October 2003 was accepted for oral presentation. A travel award of \$500.00 was received. This presentation, on behalf of the DCPNS DMF Committee, will outline the processes involved in the development and implementation of the *Insulin Dose Adjustment Policies & Guidelines Manual*.

Internal discussions are taking place with regards to a policy addendum for those DCs having both nurses and dietitians certified in insulin dose adjustment. Other documents clarifying the certification process will also be included. These will be made available to DCs upon their

completion. Thanks to all 19 dietitians who provided feedback on the applicability of the manual. All felt that the manual was clear and met the needs of their profession.

DCPNS Survey Process

The DCPNS will institute routine DC surveys (5 to 7 per year). These will be solution-focused with a strong outcomes component.

Wait Lists and Triage

Triage guidelines along with a questionnaire have been sent to all NS DCs. A number of responses have been received; but to ensure we are considering all suggestions before we proceed with the next revision, please make sure that your comments have been forwarded. It is important that we are able to come to a common understanding and approach for the province with regards to wait times for new and follow-up appointments for people attending NS DCs.

Telehealth Presentations

The third of 3 Telehealth presentations to be given by Michael Vallis, PhD, on September 30, 2003 was postponed due to Hurricane Juan. Plans are presently underway to reschedule this session and notification will be forthcoming. If you have not heard of a confirmed date and time by the middle of October, please phone the office for updated information. Michael is also working on the development of a tool for use by diabetes educators to assist in determining patient-perceived barriers, burden of disease, etc.

Complications Roundtable—Specialty Groups

As of early October, copies of the consultation documents (hypertension, hyperlipidemia, and early renal changes) including recommendations and algorithms have been circulated to all DCs (staff and affiliated Medical Advisors). Feedback and comment, with a specific emphasis on implementation, has been requested for the end of October. At this phase of our discussions, it is imperative that we give careful thought to how we proceed. With the 2003 Clinical Practice Guidelines poised for release, we need to ensure Nova Scotia DCs are well positioned to provide the best care and education possible on all metabolic aspects of diabetes.

Pilot Mobile Eye Screening Project

The final report for this project has been submitted by Dr. Kozousek to the Nova Scotia Health Research Foundation. This report outlines the project’s processes, required funding, and preliminary results. The formal evaluation is still being conducted with the assistance of the Population Health Research Unit (PHRU),

Dalhousie University. A summary piece on the project can be found in an upcoming issue of *"Diabetes Quarterly."* It is our hope that the final results will be shared with the DoH and other interested individuals to promote the value of this approach in meeting screening recommendations for diabetic retinopathy.

Forms Revision/Development

Based on the comments collected to date, revisions to the adult and pregnancy forms are about to begin. The changes do not appear to be too significant but should continue to enhance the usefulness of the forms. Work also continues on the development of a checklist for insulin pump starts. This is intended for use by facilities that are unable to use the checklists provided by the pump companies on their patient records. If you are interested in reviewing the final draft of the checklist, please contact Brenda Cook at (902) 473-3208.

DCPNS Registry

Ten (10) Nova Scotia DCs are now using the DCPNS Registry for onsite registration and data collection. Based on feedback from these programs, improvements have been made to the Registry and, specifically, the Report to the Physician. Meetings will be arranged in the near future for the DCs using the Registry to provide them with updated outcomes data.

Web site (www.diabetescareprogram.ns.ca)

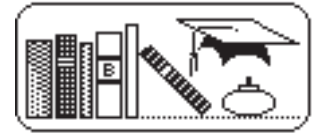
Please take a look!! The web site has been revised thanks to the hard work of Igor Grahovic. We encourage you to make yourself familiar with the new features of the web site. The discussion forum is complete and now awaits the assignment of access codes along with the development of a "how to use" guide. This forum will allow educators (with restricted access) to pose questions for consideration/response by other educators. We recognize this to be another vehicle in support of the strong network of Nova Scotia diabetes educators. We look forward to your feedback on this new feature.

DC Visits

With the release of the 2002/03 Diabetes Centre statistics as well as the data from the *Diabetes in Nova Scotia: A Ten Year Perspective*, the staff of the DCPNS have been delivering and planning a number of presentations across the province. Please let us know of your next DES Chapter meeting or District meeting, and we would be more than happy to present. These meetings also provide opportunity for discussion on new and upcoming initiatives. We'd love to hear from you.▲

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

- **101 Tips for Aging Well with Diabetes (2001).** "Aging well and staying healthy is a challenge for everyone. Aging well and staying healthy when you have diabetes is even more challenging. This book gives you ideas, practical suggestions, and things to do for you."
- **First Do No Harm: Making Sense of Canadian Health Reform (2002).** "...very well-informed, evidence-based, integrated discussion of our health care system..."
- **Heart Bypass Surgery: Everything you need to know, from diagnosis to recovery (2003).** "Real-life patient stories, extensive self-help sections, and detailed illustrations fully explain both traditional and non-traditional bypass surgery..."▲

Practice Points

1. *I have recently noticed that a number of newly diagnosed persons with diabetes have not received sharps containers from the pharmacy in which they purchased their meter for self-monitoring of blood glucose. I understood that sharps containers would be provided to all persons with diabetes (not just those requiring insulin). Can you tell me if anything has been done recently to address this issue?*

Bob Kenney, Solid Waste-Resource Analyst, Nova Scotia Department of the Environment and Labour, provided this response.

The Sharps Bring-Back Program has been operational since March 2001. Since that time, pharmacies have been giving free Sharps Bring-Back containers to users of syringes and other sharps (lancets and pen needles) for their safe storage and disposal. Once a sharps container is filled, sharps users are asked to return it to the pharmacy for safe disposal.

As most sharps users only need a container periodically, it is not expected that the pharmacy staff ask the sharps purchaser each time they purchase sharps if they require a container. It is hoped they ask as frequently as possible. The pharmacies were provided pamphlets by the Pharmacy Association of Nova Scotia (PANS) which they have been giving out since the program began. Some regional coordinators have provided pharmacies with more pamphlets as they have either run out or shelf space competition has relegated the pamphlets to "behind the counter."

The following is a list of items that various stakeholders have been working on to ensure all sharps users understand their role in the program.

PANS:

- Placed an ad in their yearly insert of the Chronicle Herald in March 2003 reminding readers of the Safe Sharps Bring-Back Program. This ad ran in the same insert in March of 2001.
- Placed an article in their Pharmacist Bulletin reminding pharmacists of their responsibility to order, distribute, accept, and properly dispose of the sharps containers. PANS ran an article on the program in the same Bulletin in February 2002.
- Continues to operate the Safe Sharps Bring-Back Program in its pharmacies. Pharmacies have distributed 16,000 3-litre containers and 7,000 5-litre containers since the program began in March 2001.

Department of Environment and Labour (DEL):

- Will continue to communicate with PANS the ongoing promotion of the Program.
- Requested that PANS ask its pharmacists to place a Safe Sharps Bring-Back pamphlet with prescriptions delivered to persons with diabetes.
- Communicated with the Canadian Diabetes Association (CDA) regarding the distribution of containers from their two centres in Cape Breton Regional Municipality (CBRM) and Halifax Regional Municipality (HRM). CDA sells sharps to people with diabetes at these centres. CDA ensures that those who purchase sharps are aware of the program and distribute the containers on a regular basis. Since the program began, the CDA centre in HRM has distributed approximately 500 containers with 150 returned.
- Will work with the stakeholders to produce a Public Service Announcement reminding persons with diabetes of the Safe Sharps Bring-

Back Program. The announcement can be released on a provincial or local basis.

- Will, on request, work with individual municipalities/regions to develop local messaging.
- Will contact Dr. A.J. from Live At Five, to encourage her to pursue a report on the importance of the proper disposal of sharps. We have not had success in reaching Dr. A.J.
- Will work with the Resource Recovery Fund Board (RRFB) and Provincial Education Committee (PEC) to place a sharps ad in the Cape Breton Post and the Chronicle Herald or to place an announcement on a separate flyer in any municipal waste diversion newsletter.
- Will continue to communicate with the Needle Exchange Program staff to ensure their separate program for sharps operates smoothly.
- Will continue to communicate with the RRFB, PEC, and the municipalities to develop other options to reduce the quantity of sharps delivered to recycling facilities.

Municipalities:

- Will insert reminders in their local educational materials of the Safe Sharps Bring-Back Program.
- Recycling facilities will continue to report the number of sharps incidents using the Sharps Reporting Form provided by DEL to the operators/managers.
- Recycling facilities will continue to attempt to identify persons placing sharps in their blue bags.
- Municipalities/regions will consider hiring Youth Corp students to assist with promoting the Safe Sharps Bring-Back Program in their area.

A partnership is being explored between the CDA, the municipalities, and the RRFB on common messaging during Diabetes month in November.

Some municipalities have carried sharps messages in their solid waste/recycling newsletters. As noted above, some municipal regions have visited their pharmacies providing more sharps pamphlets and information to pharmacists.

As you can see, a wide range of activities are ongoing in efforts to keep this topic top of mind. There is always the challenge of new people and forgetfulness as new interest areas come and go.

Practice Points

2. I would like to know how high we can expect a blood sugar to go in the child (non-diabetic) who develops a flu/fever and as a result becomes severely dehydrated? In the past, a blood sugar of 12 or even 16 has been deemed normal. Is this correct? At what point do you then make or not make a diagnosis of diabetes?

Dr. Beth Cummings, Pediatric Endocrinologist, IWK Health Centre, provided the following response.

This is an excellent question and an issue that comes up frequently in children experiencing an acute physical stress such as an illness or injury. While a blood glucose value of > 11 mmol/L is not "normal", it reflects the increase in counter-regulatory hormones related to the physiologic stress and **not** the onset of diabetes. Prospective studies have shown that 3-5% of children admitted to hospital or seen in emergency departments for acute illness or injury will have blood glucose values > 8.3 mmol/L. The blood glucose values may be quite elevated. In one study of children with gastroenteritis, elevated glucose values ranged from 10-25 mmol/L. Stress hyperglycemia occurs more often in children with high fever, dehydration, febrile seizures, and acute injury. It may also occur in children with asthma requiring frequent beta-2 agonist aerosols.

When stress hyperglycemia occurs, it usually resolves rapidly over 12-24 hours. Insulin therapy is not required. Follow-up studies have demonstrated that stress hyperglycemia is **not** a precursor of diabetes. When followed for means of 3-4 years, no patients had developed diabetes.▲

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2. Valerio G, Franzese A, et al. High prevalence of stress hyperglycemia in children with febrile seizures and traumatic injuries. *Acta Paediatr.* 2001;90: 618-22.
3. Ronan A, Azad AK, et al. Hyperglycemia during childhood diarrhea. *J Pediatr.* 1997;130: 45-51.

Canadian Distributor for Monofilaments

Sammons Preston
Mississauga, ON
1-800-665-9200 (customer service)
Cost: \$17.80

Pregnancy Focus

THE IMPORTANCE OF FOLIC ACID

Open neural tube defects (ONTDs) are the most significant fetal anomalies leading to long-term morbidity. The incidence of ONTDs can be reduced with appropriate folic acid ingestion by pregnant women. Folate is a water soluble vitamin (Vitamin B9) that was first identified in 1941 from spinach.¹ It was synthesized in 1946, and the link between a folic acid deficiency and neural tube defects in humans was first described in 1965.² Periconceptual folic acid supplementation will reduce the prevalence of ONTDs by 60%. This is seen in both low-risk women and those who have had previously affected pregnancies and are at increased risk of recurrence. A daily dose of 4 mg of folic acid has been shown to result in a 71% reduction in the recurrence of ONTDs in high-risk women.³ A similar reduction has been reported among "low-risk" women taking 0.8 mg of folic acid in a daily multivitamin preparation.⁴ In both studies, supplementation began prior to conception and continued through the first trimester of pregnancy. As a result of these significant findings, recommendations were made advising women to take appropriate folic acid supplements prior to pregnancy. However, most pregnancies are not planned and, as a result, subsequent recommendations suggested that all women capable of becoming pregnant take folic acid supplements.^{5,6} "Low-risk" women are advised to take a minimum of 0.4 mg while "high-risk" women should take 4-5 mg. Women at increased risk based on medical history, such as diabetes, should probably take at least 1 mg.

Despite these recommendations, it became apparent that the majority of pregnant women still were not taking appropriate preconceptual folic acid supplements. As a result, folic acid fortification was studied as a method to increase the daily intake of this important nutrient. In March 1996, the United States Food and Drug Administration ordered that all enriched grain be fortified with folate (0.14 mg per 100 g) by no later than January 1, 1998.⁷ Health Canada endorsed a similar fortification plan to be completed by November 1, 1998.⁸

In August 2002, we published the results of a population-based study on the effect of folic acid supplementation and fortification in Nova Scotia. During the time when supplementation initiatives were begun but before fortification was implemented, there was no significant change in the incidence of ONTDs. After fortification was implemented, there was a dramatic reduction in incidence of 54%.⁹

Reducing the incidence of birth defects is difficult but can be achieved by several approaches. For women

with diabetes, maintaining normal glycemic control is effective while all pregnant women should avoid known environmental, drug, and infectious teratogens. It is now also established that appropriate folic acid consumption reduces the incidence of ONTDs specifically. The amount of folic acid fortification in our food is small, and efforts should probably be undertaken to increase this level. Meanwhile, it is important to continue recommending periconceptual folic acid supplements as well as sound nutrition.▲

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Research to Practice

GROUP EDUCATION

Diabetes management is challenging for both those who live with this chronic condition and their healthcare providers. There is a delicate balance between dietary habits, physical activity, and medications, to name a few, that patients must learn about in order to live well with diabetes. First and foremost, diabetes education is essential for successful diabetes self-care and is continually evolving. The ADA National Standards for Diabetes Self-Management Education (DSME) states that education "is the cornerstone of care for all individuals with diabetes who want to achieve successful health related outcomes."¹ This comes on the heels of both the UKPDS and DCCT showing the importance of good metabolic control in preventing diabetes complications.^{2,3} In addition, the increasing number of people with diabetes and the economic burden on the healthcare system is staggering. There is, therefore, a need to educate people with diabetes in the most effective and efficient way possible. Education in a group format instead of individually may have the greatest impact on educators and patients alike with regards to both the delivery and reception of diabetes information.

What constitutes a group?

Groups come in many shapes and sizes and the definition varies. Generally speaking, a group is defined in size as having >3 and <20 members. Groups that are either too small or too large have been shown to be less effective. Groups always gather with a common goal or purpose in mind but often find much more. They are interactive and interdependent, with every group that comes together developing its own uniqueness.

Why group education?

Whether it is for diabetes counseling, education, or medical care, being part of a group has some great advantages:

- Groups decrease feelings of isolation and offer emotional support.⁴
- Group interactions support adherence to diabetes self-care regimens and help members make lifestyle changes.⁴
- Members learn from the insight and experience of others.⁴
- Advice may be easier to accept from peers than from a healthcare professional.⁴
- Groups enhance patient confidence, knowledge, and decision-making skills.⁵
- Groups are not as repetitive for educators as individual sessions.
- Group interactions make learning more fun!

Is group education *really* effective? What some of the studies tell us:

Research on the use of group education for people with diabetes is limited and difficult to assess due to the different types of program delivery and outcomes studied, level of patient participation, as well as what the group intervention is being compared to. Here is a look at a few key studies:

When comparing group to individual diabetes education, Rickhein et al., found that they were equally effective at improving learning, behavioral, and clinical outcomes of type 2 diabetes patients at 6-month follow-up showing that group education may be a more cost-effective alternative.⁶ Another study looked at structured group education after initial counseling at diagnosis and insulin initiation and found that there was a reduction of hypoglycemia and improved metabolic control at 6 months.⁷ This observation is further acknowledged with Trento et al. who found that group visits in people with type 2 diabetes made an important difference in health behaviors as well as quality of life, kept A1C levels stable, and increased HDL while reducing BMI and serum triglycerides at a 2-year follow-up.⁸ This study continued and found that at the 4-year follow-up, A1C levels remained stable in group patients. In addition, it was noted that there was an improvement in quality of life, knowledge of diabetes, and health behaviors which had worsened over time among those with individual consultations.⁹ The study also resulted in an increase in cost of only \$2.12 US per point gained in the Quality of Life score. From these studies, you can see that to date no one strategy of group education has been defined as "the best." Additional studies need to be done to further the knowledge of the effectiveness of group education. However, until then, diabetes educators are encouraged to try new strategies to motivate people with diabetes so that long-term, life-changing behaviors may be adapted.

The responsibility of the educator/facilitator:

It is the responsibility of each individual group educator or facilitator to develop skills that facilitate learning. This requires educators to become "skilled in using techniques and educational theories, including motivational interviewing and empowerment techniques."¹⁰ Educators need to take it upon themselves to learn these skills, update old ones, and build strategies and alternatives while planning and preparing topic areas. Group education does get easier over time, but educators must not get complacent. Since education is constantly evolving and the audience is always changing, educators should remain open-minded, keep current, and advance their skills through resources such as the Internet, books, articles, and community courses. Group education should be viewed as a "delivery opportunity" and group educators must not just teach

but "engage people in the learning process so learners can successfully implement changes to manage their own disease."¹⁰ Remember, the positive energy and passion that an educator can exude along with the belief that "you can make a difference" is contagious and can be caught by the participant.

Tips for making the most out of group education:

- **Begin with an icebreaker exercise:** Ask group members to introduce and make a brief statement about themselves. Remember that no matter how anxious you may feel as a leader, the group members are more nervous. Help them feel comfortable and relaxed.
- **Ask open-ended questions:** Get people talking by asking questions that can't be answered by a "yes" or "no" answer.
- **Guide the discussion:** Encourage others to speak, but try to keep the discussion on track. Clarify different views and summarize important points.
- **Encourage full participation:** It is important that the quiet members voice their ideas too. Listen intently to each member so that they build their trust in you. Paraphrase comments so that you know you have heard them correctly and always give positive feedback.
- **Correct misconceptions artfully:** Emphasize the worth of the member's experience and avoid turning into a "lecturer." Include other members and ask what they think of the statement.
- **Create an atmosphere of acceptance:** Accept people and respect each member's feelings even if you disagree.
- **Be patient and have fun!**

*Adapted from the specific guidelines and techniques for facilitated group discussions in the Special Supplemental Nutrition Program for Women, Infants, and Children in J Am Diet Assoc.*⁵

All groups are different and how one leads a group is completely individual. Over time, see what works best for you, but don't be afraid to experiment and try new teaching techniques. If it works for the group and for the educator, it can be an extremely rewarding experience. It must be kept in mind that group education is not for everyone, and different education approaches work for different people. Nevertheless, group education is an alternative to the one-on-one approach and offers educators a promising method of empowering people with diabetes to make positive changes in their lives.▲

Jessica Sharpe
DCPNS Special Projects Summer Student

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DIETARY CALCIUM AND HYPERTENSION

We know that dietary calcium is a major contributing factor in building and maintaining strong bones. In the 1980s, observations were made of a link between a low intake of dairy products and the increased risk of hypertension. More recently, new evidence emerged that put dietary calcium in the spotlight with its role in control of hypertension and weight. This article focuses on dietary calcium and hypertension. In a future issue of this newsletter, the link between dietary calcium and adiposity will be reviewed.

After many years of research, it was confirmed with the Dietary Approach to Stop Hypertension Study (DASH) that low fat dairy products and vegetables and fruit are key food groups that play major roles in controlling hypertension in individuals with high-normal blood pressure and in individuals with established hypertension.^{1,2}

Key Elements in the Link between Nutrition and Hypertension

Many nutrients including calcium, sodium, potassium, and magnesium impact blood pressure (BP). Intracellular calcium is maintained at a level 1/10,000 of extracellular calcium. Low dietary calcium intake stimulates an increase in the level of a calcitrophic hormone 1,25-dehydroxy vitamin D that in turn increases intracellular calcium in the vascular smooth muscle cells. This increased level of intracellular calcium increases vasoconstriction, peripheral vascular resistance, and BP.³

The antihypertensive effect of dietary calcium has been demonstrated very consistently in individuals who are salt-sensitive. People with diabetes and the elderly have a strong tendency towards salt-sensitive hypertension. The increased BP effect of high sodium consumption may be strongly modulated by an increased consumption of dietary calcium. Sodium excretion increases with increased dietary calcium intake resulting in decreased vascular volume. Conversely, sodium excretion decreases with decreased consumption of dietary calcium. As well, excess sodium intake has a calciuretic effect which increases the negative impact of a low calcium consumption.^{3,4}

In addition to calcium and sodium, potassium and magnesium are other minerals that have shown antihypertensive properties. There are many mechanisms for the BP lowering effect of potassium including consumption of a potassium-rich diet that

WORLD DIABETES DAY November 14, 2003

World Diabetes Day is co-sponsored by the International Diabetes Federation (IDF) and the World Health Organization. This year the focus is on diabetic nephropathy.

"Diabetes Could Cost You Your Kidneys...Act Now!"

The DCPNS has developed a handout focused on kidney and nerve disease for people with diabetes. For copies, please contact the office.

increases sodium excretion. Although magnesium has a role in modifying vascular tone, the exact role of magnesium in the regulation of hypertension is yet to be determined. It is evident from the DASH Study that people have a need for a combination of food groups to meet nutrient requirements rather than a need for a single nutrient.^{1,2}

Dairy Products versus Nondairy Foods and Calcium Supplements

Calcium is found in calcium-rich foods such as dairy products, leafy vegetables, cereals, and legumes, and calcium supplements including calcium-fortified foods such as soy beverages and orange juice with calcium. Dairy products provide 72% of the calcium found in our food supply. As well, dairy products are naturally rich sources of other nutrients such as vitamins D, A, and B₁₂, potassium, riboflavin, niacin, phosphorus, and magnesium. Calcium from dairy foods is twice as effective in decreasing systolic blood pressure and has a slightly greater effect on diastolic blood pressure than calcium supplements.² A low intake of dairy products is predictive of a low intake of dietary calcium. Nondairy foods have a low calcium content which requires large servings to adequately meet calcium requirements. The bioavailability of calcium is quite variable—5% in spinach to 50% in broccoli. However, the high bioavailability of calcium in some nondairy foods cannot make up for its low calcium content. Also, phytates found in seeds, nuts, cereals, and oxalates found in spinach, sweet potatoes, and walnuts decrease calcium bioavailability. Calcium supplements may be consumed to meet calcium needs. However, supplement sources should be used to supplement rather than replace foods naturally rich in calcium. Concerns such as calcium toxicity, low calcium bioavailability, and overall nutritional inadequacy require consumers to be educated regarding proper food selection to improve overall nutritional adequacy.

Key Educational Message

The concept of one disease-one nutrient must be replaced by a balanced approach to nutrition and health. Many nutrients and unidentified food components decrease risk for disease. As a result, nutritional adequacy is a primary goal in daily food selection. Reliance on mineral and vitamin supplements to replace food does not address the important role of nutrient interactions to control cell regulation.

Studies have confirmed that impaired mineral balance is associated with increased risk of high BP in all age groups, genders, and ethnic groups. These

studies established the need for 1000-1200 mg of calcium per day in combination with other food sources of essential nutrients. This need for essential nutrients translates to 3 to 4 servings of dairy products per day and at least 7 servings of vegetables and fruit according to Canada's Food Guide to Healthy Eating. Increased consumption of low-fat dairy products and vegetables and fruit does not replace traditional life-style modification to control hypertension such as increased physical activity, decreased sodium and alcohol intake, and weight loss.

In conclusion, it is essential that individuals who are hypertensive or at risk for developing hypertension: (1) consume an adequate intake of foods naturally rich in calcium, potassium, and magnesium on a daily basis and (2) actively engage in other healthy life-style habits.▲

Brenda Cook, MAEd PDt CDE
Diabetes Consultant, DCPNS

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News From Outside the Province



Nothing available for this edition of the newsletter.▲

CHECK OUT OUR NEW LOOK!!
Visit the DCPNS web site at
www.diabetescareprogram.ns.ca

Educator Sharing

DIABETES PEER SUPPORT: TAKING OWNERSHIP OF DIABETES

I was diagnosed with type 2 diabetes at the age of 45. I can clearly remember that day 2 years ago. It was late on a Friday afternoon, and I was given a page from the Canada Food Guide and prescriptions for Metformin, a glucose meter, test strips, and lancets. The week before I was prescribed medication for hypertension.

When I gave the prescriptions to the pharmacist, I was asked what meter I wanted. I had no idea. I had never seen a blood glucose monitor in my life. I finally settled on one; for no other reason than to get one and learn how to use it. At first, the pharmacist was reluctant to help me learn the fundamentals of using the monitor. She suggested that I come back in 2 weeks for the next in-store diabetes training session. After a bit of arguing and pleading, I was taken to the back room of the pharmacy and given a five-minute demonstration. So began my life as a person with diabetes.

I had a lot to learn but really nowhere to learn but the "street." My doctor had written a referral to the local diabetes centre and after waiting 4 months or more for a call from the centre, I made an inquiry. I learned that my referral was lost, and the doctor had to send another.

I was eager to learn about diabetes while waiting for the appointment. I started with what I knew I could do something about ... my weight. My doctor referred me to a dietitian. It was a good start. I now weigh 163 lbs (down from 243 lbs). I also learned that active living can affect both hypertension and diabetes. I started slowly, just walking to the end of the driveway. Now I walk at least 45 minutes. I am no longer taking Metformin.

When I finally got to the Centre, I attended the usual one-on-one and group sessions. The sessions were clinically informative but what proved most beneficial was the contact with other people with diabetes. Diabetes is a very personal challenge. If one is lucky enough to have some sort of support system, all the better. If one does not, it is a very lonely journey. Diabetes is not a new medical discovery. I recently read it can be traced back to 1552 BC. I believe that it remains one of the least understood health problems. I do not mean clinically, I mean socially.

There are many individuals hiding the fact they have diabetes from family, friends, and certainly their employers and coworkers. There is a stigma attached to diabetes; particularly, type 2. After all, it is SUGAR

diabetes. Yes, there are still a lot of people that believe it is caused by eating too much sugar.

There are many stories like my own about people who wait to get into understaffed and overworked centres; family and friends that feel diabetes is either communicable, the result of gluttony, or one of the other deadly sins; and certainly something that should never be disclosed at work, even if it means skipping meals.

The salvation to my life as a person with diabetes is my commitment to forming a peer support group for people with diabetes and their support network in the Dartmouth area.

I was very surprised when I first started inquiring about a support group. There are support groups for everything else; there had to be a group for something as common as diabetes. Wrong! I found ONE group in the Halifax Regional Municipality. The group meets the third Wednesday of every month at the Centennial Building, VG Site, QEII Health Sciences Centre. Gail Golding has been the driving force behind the group and has managed to gather a group of loyal members. She has also been my mentor for starting a group in Dartmouth. Gail is also a person with diabetes who saw the need for other people with diabetes to get together to share stories, learn about new developments, and reinforce what is already known.

Every new person with diabetes is given a great send off with guidance from the Diabetes Centres, but once "discharged," people with diabetes feel they are set adrift. This is the feeling of many people with diabetes that I have spoken with while attending clinics and sessions where people with diabetes gather. Even if individuals are lucky enough to have a family physician, the support or interest is not necessarily there. Perhaps interest is not the correct word, but given the state of the health system, a proactive support system is next to impossible. In fact, I have spoken with people who, because of the lack of physicians, must go through emergency to have prescriptions refilled. It would be impossible to expect a proactive approach to diabetes from a clinical aspect when there is not enough clinical support available.

So, how does a person with diabetes start a proactive approach to self-care? My solution was to participate in any existing programs (including becoming an active member of CDA); volunteer for a research study/trial for neuropathy; and share my experiences, successes, and failures with other people with diabetes. On September 24, 2003, I held my first Diabetes Peer Support Group in Dartmouth with the help of Anne Marie Bowie, Social Work, Dartmouth General Hospital (DGH). Arrangements have been made to hold meetings the last Wednesday of every month in the Boardroom, DGH. The first meeting

drew 5 people (including myself). I am not discouraged by the turnout. Speakers are already booked for the October and November meetings, and I need only to confirm dates with supportive professionals for the new year.

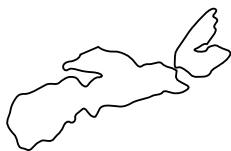
It has taken a lot of planning and a good network of professional support to have come this far, and there is certainly a long journey ahead. The main focus is to create an environment where people with diabetes can look at the reality of diabetes, keep up-to-date with current clinical developments, reinforce what is already known, relieve feelings of isolation/frustration, and hopefully discover that any step in self-care, no matter how small, is positive and that outcomes do not rest totally in the hands of healthcare providers.

I have goals for my own healthcare, but I also have a greater goal; and that is, to see a network of Peer Support Groups across Nova Scotia. I realize that is a tall order, just the logistics make it nearly impossible. I know that I will never reach all of the people with diabetes, but I would like to make a difference and do my bit to assist healthcare professionals in Nova Scotia. If anyone is interested in contacting me with comments/suggestions or would like to learn more about my plan, I can be reached by email at aveinotte@accesscable.net. My mailing address is 64 Spring Avenue, Dartmouth, NS, B2W 1Y4.

Thank you for your interest.▲

Alice F. Veinotte

INSULIN PUMPERS CANADA – NOVA SCOTIA DIVISION



This summer was a busy one for Insulin Pumpers Canada. We finalized our federal incorporation as a *not-for-profit organization* and prepared for our Diabetes and Pumping Expo. It was held on September 21, the final day of the Pharmacy Association of Nova Scotia (PANS) annual workshop. We were very pleased to learn that members of the pharmacy profession were awarded 1.0 CEU for attending the expo and learning about pump therapy. In October, Insulin Pumpers will be presenting at a 'Supper and CE' session for pharmacists, technicians, and pharmacy students. This session is being offered by Lawtons Drugs/Sobeys Pharmacy. In November, we will be holding our regular public pumping meeting along with an

Advanced Pump Therapy Clinic (to be confirmed) which will be presented by Evelyn Pytka, a clinician with Disetronic.

As the number of pump users grows, the demand on the Diabetes Centres and diabetes specialists will be tremendous. Insulin Pumpers hopes to supplement information provided by the diabetes care professional(s) to enable the pumper or pumper-to-be to make informed choices about pump therapy. For example:

- When we are in touch with a person who is contemplating pump therapy, we can offer them experience, support, educational material, and direction to some of the most up-to-date pumping information available. Information on all pumps available in Canada is provided. We do not promote any particular model or type of insulin pump. We urge them to be a "prepared pumper" and to use their time awaiting a clinic visit educating themselves so they are ready and able to work with their diabetes professional(s). This relieves some of their anxiety and gives them the opportunity to be a proactive, prepared patient.
- People who are already pumping are supported and educated about the ins and outs of pumping. To take this literally, an 'in' of pumping would be "Where can you insert an infusion set?", while an "out" of pumping may be "What is a gusher?". Sharing experiences and education with other pumpers is very valuable. We make it quite clear that we do not offer clinical advice; that is a job for you and the diabetes professional, and they should work closely with you.
- Most people are not aware of the numerous types of infusion sets that are available to them and the substantial savings that are possible. This is particularly important for people with diabetes who do not have adequate medical insurance coverage as it can make the difference between pumping or not. For instance, making pumping more affordable allows the patient to keep up with their site changes rather than stretching the limits of their infusion sites and possibly inviting infection or having high blood glucose readings for a day as the site deteriorates.
- One of the first concerns a pumper-to-be expresses is that they may find it difficult to be attached to a machine 24 hours a day. This is a very valid worry. When they speak to other adults or children on the insulin pump and find out how they work around baths, swimming, intimacy, and sports, they are relieved to find out it is very manageable. There are hundreds of tips and tricks for making pumping life more enjoyable.

Please get in touch with us if there is anything you would like to ask, discuss, or suggest. With your valuable support and input, we can continue to make a difference to people who live with diabetes. Our latest brochure is now available, and we hope to have copies sent to the various diabetes centres throughout the province in the near future with the help of the DCPNS. We hope you will find it a worthwhile handout for your clients who are interested in learning more about pump therapy. PUMP ON!

Visit our National web site (<http://www.insulin-pumpers.ca>)

Visit our Provincial web site (<http://barbchafe.tripod.com/insulinpumpersnovascotia/index.html>)▲

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Chair - Nova Scotia Division
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NOVA SCOTIA FORMULARY ON THE WEB

The Department of Health (DoH) has recently improved the Pharmacare web site by adding a searchable database of covered drugs (www.gov.ns.ca/health/pharmacare/formulary.asp). While this tool is on the DoH's web site, it is an unofficial version and is implemented for convenience. Using this tool will save you time if you are used to searching through the formulary listings or other drug sources such as the Compendium of Pharmaceuticals and Specialties (CPS).



With this search engine, it enables you to search by:

- Generic or brand name.
- Drug identification number (DIN).
- Therapeutic group/subgroup.
- Subgroup of chemical substance.

Once you have found the drug you're looking for, click on the drug name to reveal all the information about it. The information provided includes brand drug name, benefit details (who it is covered for), DIN, manufacturer, and whether there is a maximum allowable cost (MAC).

Information on MACs are included in the drug summary. These costs are used for drugs that are covered by one of the Pharmacare programs*, have more than one supplier, and are considered to be interchangeable with another product. The MAC is calculated by using the lowest price available to the pharmacy. If a patient requests a specific brand name, they may be responsible for paying the difference between the MAC and the actual cost. Exemptions to this are available if patients have experienced side effects with the lower cost alternative. A request must be received by Pharmacare from the physician detailing the reaction before alternate funding can be arranged.

For certain categories of drugs, a Special MAC is assigned to drugs within that therapeutic category. Special MACs have been assigned to select unit-dose forms, categories of drugs considered similar in therapeutic effect, and groups of devices indicated for the same functions (for example lancets and glucose testing strips). Pharmacists can bill the patient the extra costs above the Special MAC if the patient requests a particular brand and is willing to pay the difference.

Information on exception drugs is also provided. Exception status drugs can be covered when a patient meets certain criteria. Having a physician complete the standard request form is necessary for having these drugs covered. An example of an exception drug is NovoRapid (Insulin Aspart).

Using the internet and this web site to support your work is just another example of technology making our lives easier and the information we use more precise. There is nothing like having current information at your fingertips (literally). Don't forget to check it out at: <http://www.gov.ns.ca/health/pharmacare/formulary.asp>

**There are multiple Pharmacare programs that enable people to access these drugs: the Senior's Pharmacare Drug Insurance Program focuses on seniors 65 years of age or older; the Community Services Pharmacare Program focuses on people approved through the Department of Community Services; and Drug Assistance for Cancer Patients provides cancer-related medications for those with low income. The Diabetic Assistance Pharmacare Program was discontinued in 1993, but there are still beneficiaries who continue to receive coverage through this program. While no new patients are approved, this program covers medication and supplies needed for diabetes treatment of those with low income.▲*

Cory Russell, Drug Policy Resident
College of Pharmacy
Dalhousie University

News From Around the Province



NEW FACES

Welcome to:

- **Carolyn Adey, Pdt.** Carolyn has just joined the staff of the Annapolis Community Hospital DC.
- **Pam Soley, Pdt.** Pam joins the staff of the Guysborough and St. Mary's Hospitals' DCs.
- **Loralee Sibley, RN.** Lorelee joins the staff of the Musquodoboit Valley Memorial Hospital DC. (Our apologies to Lorelee as we misspelled her name in the last issue of the newsletter.)
- **Patricia Steel, RN.** Patricia joins the staff of the Eskasoni Health Centre Diabetes Program.

Congratulations!

Our heartfelt congratulations to **Maureen Topley, RN BN CDE**, Colchester Regional Hospital DC. Maureen was the recipient of the Nova Scotia Excellence in Nursing Practice Award 2003. During a ceremony at the Colchester facility in May, Maureen was honored as Peter MacKinnon, CEO, Colchester East Hants Health Authority, made the following comments: "Those of you who know Maureen know that she is deeply respected amongst her peers and that she is passionate about diabetes care and prevention. Maureen began her career as an RN more than 30 years ago at the Halifax Infirmary. Since 1988, she has served key roles in our Diabetes Care team, first as a nurse educator and in her current position as the Program Coordinator for our Diabetes Centre. Maureen has provided key leadership to our Diabetes Centre and enabled us to continually raise the bar on the standard of care delivered through the Centre. I know she will continue to champion enhancements to diabetes treatment and prevention in our district and throughout Nova Scotia." We echo Mr. MacKinnon's comments and add our recognition and praise to the tireless work Maureen does for persons affected by or at risk of developing diabetes. A job well done, Maureen.

We are also very pleased to announce and acknowledge the following:

- **Dr. Sonia Salisbury, DCPNS Medical Director**, was recently recognized by her peers. During a ceremony at the Canadian Medical Association Annual Meeting in Winnipeg, Manitoba in August,

Sonia received the Commemorative Medal for the Queen's Golden Jubilee. This award was given for her outstanding contribution to medicine and her profession. The DCPNS is so fortunate to be associated with the commitment, vision, and expertise that Sonia brings to her position as Medical Director.

- **Dr. Murdock Smith, Chair, DCPNS Board of Directors**, was recently named the Nova Scotia Family Physician of the Year, 2003/04. Although we have always known him to be a very special and committed individual, it is so nice to have him recognized by his peers. Dr. Smith has been involved with the DCPNS since its inception and has held the position of Board of Directors Chair for the past number of years. In an article appearing in the Chronicle Herald/Mail Star earlier this summer, Murdock was recognized for his commitment to his patients, his profession, his community, and his family. With a busy practice and as Medical Director at the Harbourstone Nursing Home in Sydney, he still finds the time and energy to act as a physician preceptor to medical students and serve in past and present capacities with a number of organizations and agencies. Dr. Smith has served as President of the Medical Society of Nova Scotia and President of the Provincial Medical Board. He has also served on the Boards of VON, Palliative Care, and the YMCA. We are thrilled to have his continued commitment to this provincial program and wish him continued success in his vast array of interests.

CDA NOVA SCOTIA DIVISION NEWS

Healthy, Active & Older! Retreats.

An extremely successful 50+ retreat was held at Pictou Lodge in September – 43 participants! Thanks to everyone for helping to promote this program. A *Healthy, Active & Older! Day Retreat* is scheduled in Coxheath on November 15, 2003. Promotional materials will be sent to local DCs soon.

Help Someone You Know Communication Campaign

Posters are available for this fall's *Help Someone You Know* communication campaign. Copies of these will be mailed to all DCs in Nova Scotia soon.

Weekend Retreat for Families of Young Children with Diabetes

The third Family Weekend Retreat is scheduled for June 11-13, 2004 at Tatamagouche Centre. Please pass these dates along to families of young children with

diabetes (birth to age 9 years). Registration forms will be available in late winter/early spring. Interested families should call CDA and ask to be added to the mailing list.

For more information, contact Neala Gill, Manager, Programs & Services at (902) 453-4232, option 2, ext. 231 or neala.gill@diabetes.ca.

JUVENILE DIABETES RESEARCH FOUNDATION'S (JDRF) NEWS

Jammin' for Juvenile Diabetes

Interested in a wonderful night out with dinner, entertainment, silent auction, and dancing all in support of Juvenile Diabetes Research Foundation? Then come to the 3rd Gala – *Jammin' for Juvenile Diabetes* - on Friday, October 24, at the Westin.

Enjoy a delicious 3 course dinner. Entertainment will be provided by the Songwriter's Circle of Charlie A'Court, Alfie Zappacosta, and Lynn Miles. Take part in the silent auction and then dance the night away to the sound of the Accents - an absolutely terrific dance band.

For information on sponsorship packages as well as individual tickets or just more information and details, please call Deborah at the JDRF office at (902) 453-1009.

NEW IDEAS AND PROJECTS

New Tools/Resources

The Soldier's Memorial Hospital DC completed an inpatient manual for use by staff in the care and education of persons with diabetes. It is intended that this manual will be given to persons with diabetes admitted to hospital for use during their stay. This 96-page manual has been a couple of years in development, starting first as an intern's project. The manual had lots of graphics, simple language, and a wide array of topics. Content includes: what is diabetes (questions, facts, types, reasons for development, etc.), pathophysiology, highs and lows, sick day management, managing diabetes, steps to healthy living, testing at home and target ranges, sharps disposal, and much, much more. Discussions are underway with regards to its use by facilities in both District Health Authorities 2 and 3. For more information, please contact Nancy Price or Marilyn Campbell-Profitt (Monday to Wednesday) at (902)-825-3411, ext. 243.

This same DC helped establish a walking group for people with diabetes in the Bridgetown area. A small but growing number of women with diabetes meet monthly at the DC but walk almost daily on a route

through a local graveyard. Pedometers purchased with the assistance of the local Lions Club are loaned to these women to help track their progress and assist with motivation. Interest has recently been expressed for a similar program in the Middleton area. For more information, please contact Nancy or Marilyn (see above contact information).

COMMUNITY AWARENESS ACTIVITIES

Remember, sharing activities from your area through this newsletter allows others to increase their potential reach and promotes invaluable "networking."

The following is a sampling of Community Activities being supported by DC staff across the Province.

Staff from the Inverness Consolidated Memorial Hospital DC were interviewed by the local cable TV station during July. The focus of the interview was "Diabetes Awareness." During this same month, a Seniors Awareness session was held with over 50 people in attendance. The focus of this session was healthy eating.

Staff of the Roseway Hospital DC delivered an inservice session to new staff on insulin and insulin delivery devices as well as information on the treatment of type 2 diabetes.



News From the
Company
Representatives**

Lifeline (Personal Response and Support Services) has a new brochure specific to patients with Heart Failure. This, along with other brochures, can be ordered directly by calling 1-800-LIFELINE (1-800-543-3546) or by visiting the web site at www.lifelinecanada.com and filling out the online form for healthcare professionals in the Publications Section.

DIABEATERS. Lee-Anne Kennedy, RN CDE, is excited to introduce Diabeaters.com to the staffs of Nova Scotia DCs. Diabeaters began in 2000 as a Canadian company that specialized in education resources for diabetes education professionals. They now carry a full line of unique, high-quality diabetes-related specialty products for professionals and persons with diabetes. The resources have been developed and derived from inquiries from both professionals and their patients. These specialty products really do *make a difference!* □□□

□ **For the Professional...** the *Diabaters Professional Shop* has a large variety of teaching tools and resources for use in diabetes clinics, including Power-Point cartoons, Glucose Wands, A1C Pillows, Insulin Resistance Expanding Globe, □monofilaments, and a new clinic pedometer program, "Walk Away From Diabetes Complications." The *Diabaters' Clip-Art Gallery* is a □selection of diabetes related cartoon clip-art. □ Submit *your* request for a clip-art item or cartoon illustration!

Visit the *Diabaters Teaching Treasures*, a section dedicated to the free sharing of program tools and ideas that are used daily in clinics. □ Download the *Diabaters Power Point Jeopardy* for a fun way to share information with clients, students, and communities. If you have developed "teaching treasures" such as teaching sheets, clinic forms, overheads, □or games and would like to share it with your colleagues, submit it to the *Teaching Treasures* section. It's a great way to prevent others from reinventing the wheel! □

Resources For Your Clients... The □*Diabaters Shop* has a variety of □specialty diabetes products including medication reminders, foot check mirrors, impotence assistive devices, □Frio Cooling Wallets, Sugar Keys, Digi-Walker pedometers, books, calendars, bathing suits, shoes, and seamless socks. The *Diabaters Message Board* provides public visitors a place to network and discuss issues with others affected by diabetes. There is □an "Ask The Expert" section for the public where members can post a wide variety of general diabetes-related questions to a panel of □certified diabetes educators. □□ If you would like to join our moderator team...contact us at info@diabaters.com. □□

Educators and persons with diabetes are invited to visit diabaters.com. □ If you would like to see additional products, different features, or suggestions for improvement, let □*Diabaters* know – they value your opinion!

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Diabetes Products That Make A Difference FOR
THOSE WITH DIABETES *and*
THE DIABETES PROFESSIONAL.

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



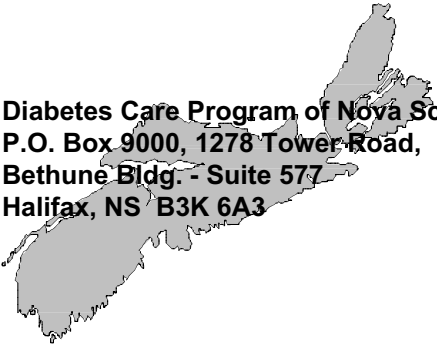
The Diabetes in Children & Adolescents Management Guidelines Manual 2nd Edition (2003)

The 1995 version of this manual has been completely revised to provide **current** comprehensive guidelines for the management of children and adolescents with diabetes.

The manual is divided into 17 color-coded sections and includes the following topics: 1) Diagnosis and Initial Assessment of the Child/ Adolescent with Diabetes; 2) Diagnosis and Ongoing Management of Children & Adolescents with Type 2 Diabetes/ MODY; 3) Psychosocial Considerations; 4) Age-Appropriate Education; 5) Adolescent Issues; 6) Nutrition; 7) Exercise; 8) Insulin; 9) Pump; 10) Blood Glucose Monitoring; 11) Monitoring of Ketones; 12) Hypoglycemia; 13) Sick Days; 14) Diabetic Ketoacidosis; 15) Surgery; 16) School and Day Care; 17) Documentation.



The manual can be purchased at a price of \$35.00 within Nova Scotia and \$37.50 outside the province. If you would like an order form, contact the DCPNS office by phone (902) 473-3219, fax (902) 473-3911, or e-mail dcpens@diabetescareprogram.ns.ca



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