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*Professional Pack Newsletter - Published by Sampling Canada for front line diabetes educators*

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# Diabetes Management Co-operative (DMC) — St. Joseph's Health Care London

**T**o provide support to clinics and centres, provide patient flow between specialists and Primary Care Physicians, provide a patient registry for diabetic patients, co-ordinate standard of care and education in the area.

The Diabetes and Endocrine clinic was opened at St. Joseph's Health Care London in May 2000, at which time the co-ordinating pilot project (DEMS) Diabetes Electronic Management System was implemented in our clinic.

### Success:

The Diabetes and Endocrine clinic has proved to be a successful endeavour involving endocrinologists from London Health Science Centre and St. Joseph's Health Care London to consolidate diabetes services city-wide. The DEMS has proved to be a useful tool for Endocrinologists, registered nurses, registered dietitians, clerical and of course the patient who is able to have a typed report of his/her visit to take home.

### Challenges:

Communication, roles and training of staff, implementing standard processes in our clinic, and funding. The DEMS is arguably the most important single element of our Diabetes Management Co-operative. A consortium composed of Novo Nordisk, the

Mayo Clinic, and Digineer have developed software for an Electronic Record System (DEMS) which provides a comprehensive medical record encompassing all aspects of care for people with diabetes. At present one Endocrinologist is using the DEMS for patients in our clinic and we are hoping to have the remaining Endocrinologists in our clinic come on board in the spring of 2001. As a DEMS user, we are part of an academic alliance which includes the Mayo Clinic, a Dutch user group and a user group in Greece. This group consults with each other on a regular basis and reports results at regular meetings which we believe will foster major advances in electronic management of all chronic diseases and not just diabetes.

We are working towards implementing the DEMS in the six Thames Valley hospitals and once we understand the problems associated with establishing and maintaining these links, we will expand the use of DEMS to Diabetes Education Centres in these hospitals.

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**Aspartame,  
A Consultative Approach**

For 6 years I have been specialising in diabetic consultations with patients at the pharmacy level advising my patients with diabetes on a vast array of topics ranging from drug to drug-disease interactions, blood glucose monitoring, insulin administration, and nutritional information. I find diet is the area in which the patient feels most vulnerable, and seeks information to satisfy their nutritional anxiety.

When first approached by patients with diabetes, I find that their initial concerns revolve around diet and nutrition. They fear they will no longer be able to indulge in the foods they love, specifically sweets. We now counsel our patients on moderation and flexibility in the diet. They are taught how to balance their intake of carbohydrates, fats, and proteins. By recommending a sweetener like Equal®, your patients can enjoy their favourite sweets without concerning themselves with the potential for added sugars; thus, allowing for even greater modification in other areas of the diet, if desired. Thanks to products like Equal®, people with diabetes have the freedom to indulge in a variety and quantity of desired foods and desserts.

I am pleased with the reactions I get from patients

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# Lipid Management

Last May, a working group of Canadian experts published updated Guidelines on the management of hypercholesterolemia and other dyslipidemias. They made numerous changes from the previous guidelines, but one of the most significant affects people with diabetes.

In the 2000 guidelines, individuals over the age of 30 who have diabetes mellitus (defined as a fasting blood glucose level of  $\geq 7.0$  mmol/L) have been moved to the highest risk category. They are now considered to be at "very high risk" for coronary artery disease (CAD) placing them at the same risk level as people who have had a heart attack or stroke.

A recent study has also shown that in diabetic patients, lipid management is even more important than glucose management for the reduction of cardiovascular risk. It was found that intensive blood glucose control in patients with type 2 diabetes reduced the incidence of retinopathy and nephropathy, but had less of an impact on CAD risk. It has been shown elsewhere that type 2 diabetes increases the risk of CAD by a factor of two to four. For this reason, the Canadian Working Group described lipid lowering and blood pressure control as "major priorities" for these patients.

The Guidelines also recommend target lipid levels for people in various risk groups. They suggest that very high risk patients, including people with diabetes, aim to keep LDL cholesterol levels below 2.5 mmol/L, triglyceride levels below 2.0 mmol/L and the ratio of total cholesterol to HDL cholesterol below four.

The Guidelines also now recommend that people with diabetes whose lipid levels are above their targets immediately begin drug treatment in conjunction with diet and lifestyle changes, rather than first doing a trial of diet and lifestyle changes alone. This change underscores the need for aggressive lipid management in these high-risk patients.

For people with elevated LDL cholesterol levels, with or without abnormal triglyceride levels, the statins are recommended as the drugs of choice. Research has shown that in people with diabetes, a statin drug can reduce the likelihood of a cardiovascular event and may increase survival. These drugs cause relatively few side effects and are all available in once-a-day tablet forms.

*Sponsored by an unrestricted educational grant from Pfizer Canada Inc.*

## Brita

We all know the importance of water consumption as it relates to healthy living but it's hard to know exactly what's in your tap water. The Brita Filter System improves the taste and quality of tap water by virtually eliminating lead, chlorine, bad taste and odour. The Brita Pitcher Filter System is ideal for use around the home, office and your clinic. Water has a necessary role in meal planning. Many of your clients will want to lose extra pounds so an increase in water consumption should become part of their meal plan, because it helps the body metabolize stored fat more efficiently,

reduces excess fluid retention and helps maintain good muscle tone. Best of all it quenches thirst with no calories, no fat and no cholesterol. Those clients not previously involved in regular exercise will, of course, need to know the importance of hydration during their exercise workouts.

Brita has an informative web site — [www.brita.ca](http://www.brita.ca)



Equal (from page 2)

when I inform them that one packet of Equal® can be substituted for two teaspoons of sugar in their coffee or tea. With less than 4 calories per packet this results in an 87% reduction compared to sugar. Also, the consumers who enjoy cooking and baking are happy to realise that Equal® Spoonful can be substituted 1 to 1 for sugar. I remind them that Equal® is metabolized just like food, and unlike sugar, does not interfere with glucose or insulin levels. Equal offers an excellent consumer program with Club Equal. Membership includes a free newsletter "EqualTime" that provides diabetes management information, recipes, and promotional offers. For more information or to become a member of Club Equal, call 1-800-323-5316, or visit their web site at [www.equal.com](http://www.equal.com). Equal® also provides resources for professionals, including patient support materials, samples, recipes and information kits. This service is available by telephone or fax order at 1-888-313-6802.

When discussing Equal® with my patients, inevitably, questions concerning the safety of sweeteners arise. Clearly, I have no difficulty at all in supporting Equal® 100%. Study after study and countless professional bodies stand behind the safety and efficacy of aspartame (brand name NutraSweet). All reports in the literature support the fact that aspartame does not have any negative effect towards cancer, headaches,

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# LifeScan

## Alternate Site Testing - More Choice, Less Pain

**T**he newest development in blood glucose monitoring may have overcome the biggest barrier to frequent testing: pain.

The development is alternate site testing (AST), a regime that describes the sampling of blood from a location other than the ultra-sensitive fingertips. This breakthrough – nearly painless and effective for many people with diabetes – has been approved for the first time by Health Canada, but only for the One Touch® FastTake Meter or the new One Touch® Ultra Meter from LifeScan when used in conjunction with FastDraw™ test strips.

The key to this breakthrough is sample size. Conventional meter/strip combinations require blood samples of between two and nine microlitres. While this is not a huge amount of blood, it is still significant. Thus, the only test site where you are guaranteed to get a sufficient sample is in the fingertips. This is bad news for two reasons. Number one, blood vessels and nerve endings tend to congregate in the same places, so the handy fingertip test sites are also among the most sensitive parts in the body. Number two, fingertips have many other uses, which can be compromised if you are forever poking them full of holes.

The Ultra/FastDraw combination can generate an accurate blood glucose measurement in 5 seconds with a sample of only 1.0 microlitre, an amount so small that many people can harvest enough blood for an accurate test from a prick in their forearm or upper arm.

This has multiple benefits. Number one, there are fewer nerve endings in these locations, reducing the pain of testing so dramatically that some people experience no discomfort whatsoever. These skin surfaces also offer a much greater expanse from which to reap a sample. If a patient is fingertip testing four times a day, they would have to prick every finger on either hand as many as three times each week. This constant irritation causes a buildup of scar tissue that, over time, can make the testing even more uncomfortable. With AST, there is more available skin surface to choose from on one forearm than on all 10 fingertips combined.

Penny Wilkinson, a diabetes nurse-educator who conducted trials with the FastDraw strip in a clinic in Port Moody, B.C., says the AST breakthrough offers "a terrific advantage" to her patients. Wilkinson works mostly with children and teens. "Some of these kids have had diabetes since they were very young; they haven't had a lot of choices in their life,"

she says. Many are also testing up to six times a day – a great pattern that they are tempted to abandon if their fingers are sore. And with kids, Wilkinson adds, there is often a concern about cleanliness when they are taking blood samples from their fingertips. AST addresses all these issues, giving testers more flexibility and greater comfort, and steering them to a sample site that is apt to be cleaner on almost every occasion.

If there is a drawback to the new technology, it is that AST may not work for everyone. Even though the 1.0 microlitre sample is small, some people will still have difficulty getting an adequate amount from their arm. Fortunately, the FastDraw strip has a confirmation window, so testers will always be sure whether the sample is large enough to give an accurate reading.

In the diabetes field, "everyone has been waiting for the big breakthrough, the cure," says Wilkinson. The truth, however, is that we have – in the last quarter century – revolutionized the treatment of diabetes in small increments, proving the efficacy of testing and fine-tuning our understanding of the effects of diet and exercise. In that context, Wilkinson concludes, "everything that makes day-to-day management easier is important – and this is just a great step forward."

### How alternate site testing works

To conduct an alternate site test, a patient should:

1. Select a clean, soft, fleshy area, (away from the bone) that is free of visible veins or excess hair.
2. Massage the area to bring blood to the surface.
3. Set the Penlet® Plus sampler for a deeper puncture.
4. Press and hold the sampler to the site for a few seconds before triggering the puncture; then hold for a few seconds more.
5. Allow enough time for an adequate drop of blood to develop before applying the test strip. The capillary action of the FastDraw strip will draw the blood in until the confirmation window is completely filled.

### About LifeScan Canada

LifeScan Canada is a member of the Johnson & Johnson Family of Companies. For more information on our products and services or the LifeScan Education Institute, call the LifeScan Customer Care Line toll-free at 1 800 663-5521. You can also visit our Web site at [www.lifescanCanada.com](http://www.lifescanCanada.com).

Equal (from page 3)

epilepsy, allergic reactions, vision, weight gain or any other anecdotal complaint that has been voiced. Furthermore, aspartame is so safe that pregnant and lactating women may use it without risk. Even children may safely use aspartame. Of note, one must remember that young children do require lots of calories for growth. Being low-calorie, aspartame may not provide sufficient energy for children. The only people for which aspartame is not recommended are those with the rare disease phenylketonuria or PKU. People with PKU are unable to properly metabolize the amino acid, phenylalanine. For people with this condition, it is suggested that they avoid phenylalanine-containing foods, such as chicken, ground beef, milk, certain vegetables, and aspartame.

To leave a solid impression, I like to remind my patients that the following organizations support the general use of aspartame:

- Canada's Health Protection Branch (HPB)
- United States Food and Drug Administration (FDA)
- World Health Organization (WHO)
- American Cancer Society
- American Council on Science and Health
- American Diabetes Association
- American Dietetic Association
- American Heart Association
- American Food Information Center (AFIC)

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## CRYSTAL LIGHT

### CRYSTAL LIGHT BERRY SLIM

- PLACE 1 cup prepared CRYSTAL LIGHT Strawberry-Kiwi Low Calorie Drink Mix, 1/3 cup sliced strawberries or peaches and 2 Tbsp plain yogurt in blender container.
- BLEND on high speed until smooth. Makes 2 cups.

1 Serving = 1 cup (250 ml)  
Calories 20 Protein 0.9 g Fat 0.5 g  
Carbohydrate 3.0 g

#### Canadian Diabetes Association Food Choice Value

1 cup = 1 FF



### CRYSTAL LIGHT MELONADE

- PEEL and slice 1/3 ripe small canteloupe. Place 1 cup prepared CRYSTAL LIGHT Tangerine-Grapefruit Low Calorie Drink Mix and prepared fruit in blender container.
- BLEND on high speed until very smooth. Serve over ice if desired. Makes 2 servings.

1 Serving = 1 cup (250 ml)  
Calories 26 Protein 0.6 g Fat 0.2 g  
Carbohydrate 5.6 g

#### Canadian Diabetes Association Food Choice Value

1 cup = 1/2 FF

### CRYSTAL LIGHT FOOLISH MARGARITA

Prep time: 5 minutes.

- PLACE 1 envelope CRYSTAL LIGHT Lemon-Lime Flavour Low Calorie Drink Mix, 1 1/2 cups water, 1/2 cup chilled orange juice and 2 Tbsp lime juice in blender container.
- BLEND on high speed until drink mix is dissolved.
- ADD 3 cups ice cubes; blend until smooth. Makes 4 (1 cup) servings.

Per Serving  
Calories 23 Protein 0.4 g Fat 0.4 g Carbohydrate 4.1 g

#### Canadian Diabetes Association Food Choice Value

1 serving = 1/2 FF

## DERMAL THERAPY™ Healthy Skin Guide

Recently, **DERMAL THERAPY™** conducted a number of focus groups in Toronto to talk to diabetes sufferers about their skin health. We want to share these important findings with you!

All of the participants suffered from severe dry skin but only a few knew that their dry skin was probably linked to diabetes. In general, the level of awareness and involvement in patients managing their condition was surprisingly poor. These groups increased **DERMAL THERAPY'S** commitment to supporting clinics and the important work you do. Clearly, there is a huge need for increased professional education for diabetes sufferers regarding skin health.

Not surprisingly, almost all of the participants complained mostly about dry feet, especially their heels. Not only were their feet dry, itchy and sore, but they were also a source of inconvenience and embarrassment. Respondents said that socks and nylons snagged or tore on their heels and they felt too self-conscious to wear sandals in the summer.

No wonder **Heel Care** is the fastest-selling formula of **DERMAL THERAPY™!**

**DERMAL THERAPY™** products include:

- ✓ **Heel Care:** 25% UREA and Alpha Hydroxy Acid.
- ✓ **Finger Care:** 20% UREA and Alpha Hydroxy Acid.
- ✓ **Hand, Elbow and Knee Cream:** 15% UREA, Alpha Hydroxy Acid and pure Silk Protein.
- ✓ **Extra Strength Body Lotion:** 10% UREA, Alpha Hydroxy Acid and pure Silk Protein.
- ✓ **Face Care Moisturizing Lotion:** 1% UREA, fine emollients, Alpha Hydroxy Acid and pure Silk Protein.
- ✓ **Foot Massage Cream:** 1% UREA, Alpha Hydroxy Acid, camphor, menthol and mint.

**DERMAL THERAPY™** is a trademark of Dermal Therapy Research Inc.

To order additional units or to comment on the Healthy Skin Guide please call (416) 240-5380

Equal (from page 4)

- Calorie Control Council
- Centers for Disease Control & Prevention (CDC)
- Cornell University
- European Food Information Council
- International Life Sciences Institute
- Massachusetts Institute of Technology
- Mayo Clinic
- Multiple Sclerosis Foundation
- U.K. Ministry of Agriculture, Fisheries, and Food (MAFF)
- U.S. FDA's Center for Food Safety and Applied Nutrition

Additional scientific literature can be obtained by visiting [www.aspartame.org/science.html](http://www.aspartame.org/science.html).

Please remember, when approached by patients regarding their concerns with aspartame, it is essential to address the fact that the scientific literature has supported the use of aspartame. As with any product, anecdotal hearsay can sway public opinion. In science, only clinical evidence is used to determine the safety and efficacy of any drug / product. Overwhelmingly, aspartame has received abundant scientific support. Thus, these facts should leave the health care professional feeling extremely confident in recommending Equal® for nearly all patients who require a sugar substitute.

Mitchell D. Silverman B.Sc. Phm.

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your first priority, trust  
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## AstraZeneca — ACE Inhibitors in Diabetes Treatment

Increasingly, clinical trials are demonstrating the benefits of ACE Inhibitors in patients with diabetes. Not only are ACE Inhibitors recommended as preferred therapy to control hypertension in diabetic patients, but there is now growing international consensus that ACE Inhibitors may reduce the progression of complications in diabetes such as nephropathy and retinopathy.

The enclosed booklet "*International Consensus*" from AstraZeneca (makers of Zestril®) summarizes current clinical guidelines recommending the consideration of ACE Inhibitors to control hypertension and the complications of diabetes.

Please remember that ACE Inhibitors must be prescribed by a doctor and each patient should be individually assessed to determine if ACE Inhibitors are the best therapy for their condition.

## Colgate Total

As Diabetes Educators, alerting your clients to the special care that people with diabetes need to take is all part of their diabetes management program. It's particularly important for them to take proper care of teeth and gums since studies have shown that people with diabetes tend to be three times more susceptible to gum disease.

Colgate Total® Toothpaste is the only toothpaste clinically proven to go beyond cavity protection to fight plaque, tartar, and gingivitis, the first stage of gum disease. Therefore, brushing with Colgate Total® flossing, eating a balanced diet, and making regular visits to your dentist are all important things to remember for proper oral health.

## FIBRE 1\*

General Mills has included a full sized sample of their *Fibre 1\** cereal. *Fibre 1\** currently offers the highest source of dietary fibre among high fibre cereals (Source: Survey, Chatelaine, June 2000). *Fibre 1\** is also low in fat, and cholesterol free. As you teach your clients to be label savvy you will probably want to point out that a half cup serving of *Fibre 1\** has 13 grams of fibre and, although it has no sugar added, aspartame gives it a palatable sweetness. The half cup (30g) serving has a Canadian Diabetes Association Food Choice Value of 1 Starch Choice. The two separately sealed packs guarantee freshness and crunch.

# The Power of Active Healing Diabetic Foot Ulcers

## REGRANEX becaplermin 0.01% Growth Factor Therapy

**D**iabetic foot ulcers represent a significant social and economic burden for patients. They can result in severe debilitation, loss of income and a substantial reduction in quality of life<sup>1</sup>. Furthermore, the failure of wound healing increases the risk of complications such as cellulitis, osteomyelitis and gangrene which often lead to amputation<sup>2,3</sup>.

**REGRANEX** is an innovative, bio-engineered growth factor that can actively heal diabetic foot ulcers. It is the first treatment that offers bioactive wound healing power in a simple topical therapy. **REGRANEX** is indicated to promote the healing of full-thickness, lower extremity diabetic ulcers. It is safe and effective in increasing the incidence of complete wound healing and decreasing the time to complete wound healing.

**REGRANEX funding assistance** can be easily attained by giving your patients a prescription for **REGRANEX** and by asking your patients or their caregivers to call the **REGRANEX Feet First Support Program** at: 1-877- REGRANEX (1-877-734-7263).

**REGRANEX** should be used in conjunction with a good wound care regimen that includes:

- Debridement (to remove all calluses and necrotic tissue)
- Pressure relief

- Moist dressings changed with a frequency to maintain a moist environment (usually once a day)
- Systemic treatment of wound-related infection

Please see the product monograph for further safety and prescribing information.

For all inquiries about **REGRANEX**, please call the **REGRANEX Feet First Support Program** at 1-877- REGRANEX (1-877-734-7263).

### Foot notes!

1. Wieman TJ, Smiell JM, Su Y. Efficacy and safety of a topical gel formation of recombinant human platelet derived growth factor BB (becaplermin) in patients with chronic neuropathic diabetic ulcers: a phase III randomized placebo-controlled double blind study. *Diabetes Care* 1998; 21(5):822-827.
2. Steed DL, the Diabetic Ulcer Study Group. Clinical evaluation of recombinant human platelet-derived growth factor for the treatment of lower extremity diabetic ulcers. *J Vasc Surg* 1995; 21:71-81
3. Steed DL et al, the Diabetic Ulcer Study Group. Effect of extensive debridement and treatment on the healing of diabetic foot ulcers. *J Am Coll Surg* 1996; 183:61-64



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