



# Medical Journalist Report of Innovative Biologics

by Morton Walker, DPM

Copyright 1999 by Dr. Morton Walker

Freelance Communications

484 High Ridge Road • Stamford, Connecticut 06905 USA

Phone 203-322-1551 • Fax 203-322-4656

## The New Canadian Therapeutic Herbal Tea for Non-Insulin-Dependent Diabetes Mellitus

"Up to 16 million people in the United States and Canada have a disease that some researchers say is almost entirely caused by poor nutrition and could be prevented or reversed with a whole-foods diet. Type II diabetes, also known as noninsulin-dependent diabetes mellitus (NIDDM), affects roughly 95% of diabetics and in almost all cases develops after age forty," advises geochemist C. Leigh Broadhurst, PhD, director of 22nd Century Nutrition, a nutritional science consulting firm. Dr. Broadhurst published her statement in *Nutrition Science News*.<sup>1</sup> According to the World Health Organization, the actual number of individuals living in continental North America suffering from NIDDM are approximately 13.64 million Americans (5.4% of the populace) and 2.36 million Canadians (8.9% of the populace).

Dr. Broadhurst explains that NIDDM is vastly different from Type I, or the less prevalent insulin-dependent diabetes mellitus (IDDM), which primarily affects children and teenagers. IDDM is usually caused by the autoimmune destruction of beta cells, the insulin-producing cells of the pancreas. Those people with irreversible conditions of insulin-dependent diabetes mellitus must inject insulin daily.

For one of two possible reasons, however, mandatory injection of insulin is not the situation for persons having NIDDM.<sup>2</sup> While they produce enough natural insulin, the physiologies of noninsulin-dependent diabetics do not use it effectively because (1) Insulin receptors on their cells may fail to accept insulin hormone the way they're supposed to or (2) the cells may possess too few hormonal receptors. In either case, people with such a condition are identified as having "insulin resistance," meaning the cells are resistant to the hormonal signaling of insulin.<sup>3</sup>

For NIDDM, only half of the disease sufferers have been diagnosed. Incidence is higher in males than in females and rises with age.<sup>4</sup>

An undisputed factor in the origin of NIDDM is the effect of obesity on the condition.<sup>5,6</sup> According to my copy of the ultimate nutritional medicine database, Dr. Melvyn R. Werbach's *Nutritional Influences on Illness CD-ROM*, "Type II diabetics should lose weight. Also, they are at increased risk of coronary heart disease, and this risk is intensified by high intake of foods rich in saturated fats and cholesterol, including many of the 'sugar-free' products that were once regarded as an essential part of diabetic diets.... Amounts and types of carbohydrates and fats should be tailored individually, but such advice should be tempered by an awareness of how little we know about what constitutes an optimum diabetic diet."<sup>7</sup>

Thus, obesity is associated with insulin insensitivity. Plus the amount of body fat and its distribution play roles in the disease's onset.<sup>8,9</sup> Weight loss with a significant decrease in body fat percentage, is a prime objective in the natural or non-drug treatment of most type II diabetic patients, since it improves all aspects of the disease and can result in reversal of it.<sup>10,11</sup>

### Assessment Findings and Diagnostic Tests in NIDDM

Usually the symptoms of NIDDM are vague, long-standing, and develop gradually. Such patients generally report a family history of diabetes, and their symptoms relate to hyperglycemia with polyuria, polydipsia, polyphagia, and fatigue. They may complain of weakness; vision changes; frequent skin infections; dry, itchy skin; sexual problems; and vaginal discomforts, often from yeast vaginitis (candidiasis). Assessment by inspection shows poor skin turgor, dry mucous membranes from dehydration, decreased peripheral pulses, cold skin temperature, and decreased reflexes upon palpation. Patients exhibiting one of the NIDDM main complications, diabetic ketoacidosis, may have a characteristic "fruity" breath odor because of increased acetone production. And orthostatic hypotension may be apparent.<sup>12</sup>

From diagnostic tests in nonpregnant adults, the diagnosis of NIDDM is more readily made by evaluating one or more of the following findings in a patient:<sup>13</sup>

- a random blood glucose level of 200 mg/dl or above,
- a fasting plasma glucose level of 140 mg/dl or greater on at least two occasions,
- a blood glucose level above 200 mg/dl at the two-hour time period during the glucose tolerance test,
- urinalysis showing acetone,
- blood testing for glycosylated hemoglobin (hemoglobin A) is positive,
- diabetic retinopathy is found upon ophthalmologic examination.

### The Long-time Use of Herbal Remedies for Diabetes

Since antiquity, there have been non-drug botanical medicines for the healing of diabetes. Even before the time of Hippocrates sugar in the blood was treated with herbal remedies. Recent scientific investigation has confirmed the efficacy of these plant preparations, some of which have proven remarkably effective.<sup>14</sup> With the reference aid of two excellent, modern, natural medicine encyclopedias, here I alphabetically list most of the established therapeutic herbs accompanied by a brief description of their effects on Type II diabetes.<sup>15,16</sup>

**Asian ginseng:** Showing a direct blood sugar-lowering effect, Asian ginseng (*Panax ginseng*) stimulates the release of insulin from the pancreas to increase the number of insulin receptors.<sup>17-19</sup> A 1995 clinical study showed that 200 mg of ginseng extract taken daily improves blood sugar control as well as energy levels in NIDDM.<sup>20</sup>

**Bitter melon:** Long used in folk medicine as a remedy for diabetes, the fresh juice or extract of the unripe fruit of bitter melon (*Momordica charantia*) has a blood sugar lowering action.<sup>21-23</sup> Composed of several compounds with confirmed antidiabetic properties, bitter melon's main component, charantin, is composed of mixed steroids that are more potent than the antidiabetic drug tolbutamid.<sup>24</sup>

**Fenugreek:** Demonstrating effects against diabetes in experimental studies, the seeds of fenugreek (*Trigonella foenum-graecum*) possess an active principle in their defatted portion containing the alkaloid trogonelline, nicotinic acid and coumarin. Administration of the defatted seed in a daily dose of 1.5 to 2 grams per kilogram of body weight to both normal and diabetic dogs reduces fasting and after-meal blood levels of glucose, glucagon, somatostatin, insulin, total cholesterol and triglycerides, while increasing the HDL-cholesterol levels.<sup>25</sup>

**Gymnema:** Assisting the pancreas in the production of insulin in NIDDM, gymnema (*Gymnema sylvestre*) also improves the ability of insulin to lower blood sugar. It's an excellent substitute for oral blood sugar-lowering drugs in NIDDM, and up to 400 mg per day of gymnema extract may be prescribed.<sup>26,27</sup>

Other herbs considered useful for the treatment of Type II diabetes are prickly-pear cactus, oligomeric proanthocyanidins (OPCs), procyanidolic oligomers (PCOs), blueberry leaves, bilberry, capsaicin (the active component of cayenne pepper), ginkgo biloba extract, aloe vera juice, eleuthero (Siberian ginseng), maitake, onion, garlic, the Ayurvedic remedy *Coccinia indica*, and another Indian botanical *Pterocarpus marsupium*.

## A Therapeutic Herbal Tea Administered to Canadian Diabetics

"This new, powdered, herbal tea so enthusiastically prescribed by our family physician [R. A. Martin, MD] is bringing down my husband's elevated blood sugar," says Katherine Alsopp of Grand Prairie, Alberta, Canada. "Roscoe, who is now 71 years old, was diagnosed with noninsulin-dependent diabetes in July 1997. He suffered a stroke on the right side the year before, and his diabetes seems to be a complication of that stroke.

"Taking those new kind of herbs has caused his blood sugar to drop from 230 [mg/dl] to 60, and he doesn't need to drink a lot of water or urinate so much anymore. The ulcer on his leg cleared up too," Mrs. Alsopp said about her husband. "The herb powder gets slow-cooked for two to three hours with water; I put it up to simmer and the tea steeps so that Roscoe can drink it a couple of times a day. The tea tastes just fine.

"Urination is not a problem for him anymore, and his leg is just fine. It's working better. The ingrown toenail on his right

foot that had gotten infected before he started drinking the tea has cleared up completely; the doc says it's from his taking the tea. If you want fuller information about my husband, then telephone Dr. Martin," says Mrs. Katherine Alsopp.

Another patient, 74 year-old Kyung Pak Ku of Vancouver, British Columbia, a Korean woman, was treated with the brewed herbal tea by Myung Joong Yoon, MD, also of Vancouver. Mrs. Ku has experienced much improvement in her Type II diabetes. "I be weak but now feel much better than before," Mrs. Ku told me. "I get diabetes ten year ago and now have drink down four boxes of herbs in past eight months. My much sweet blood, she drop to a good health level from tea drinking. So now I stay with much more drinking tea. They do good for me."

"I got fine results with those cooked up herbs," advised Frank Walstonroff of Calgary, Alberta, Canada, "They helped my diabetes during the whole time I took them, about three months, but I quit using them. Why? Because the herbs are too expensive! The Canadian Government don't pay for no herbs to cure diabetes - but allows only drugs - so I'm taking the drugs that Dr. Pilgrim substitutes. The doc wants me to drink this herb tea that he recommended, but there's no health insurance reimbursement for buying it. Listen! I take help from what's free to me.

"I came down with diabetes in 1987 and had big trouble during this whole twelve years. Then, my blood sugar dropped down when I took the tea," said Mr. Walstonroff, "but now it has shot up again to 243 [mg/dl]. The Government ought to give out the herb powder free like they do for the drugs."

## The Primary Investigator of this Antidiabetic Remedy

There is ongoing laboratory animal testing and clinical research with human volunteers being conducted at Yale University, Cambridge University, and the University of Calgary. The universities' investigations are continuously improving on a certain herbal formula found efficacious for the treatment of noninsulin-dependent diabetes mellitus. Such research is being supported by the product's present manufacturer, Eastwood Bio-Medical Research, Inc. of Vancouver, a company newly-formed to market the product.

In 1996, having performed the original studies on this herbal remedy, the University of Calgary's medical scientists approached Eastwood's venture capitalists to introduce their discovery as a fully commercialized entity. The principals at Eastwood agreed and named their new antidiabetic herbal remedy "Eleotin®."

The main scientist at The University of Calgary, who developed and experimented with the practical applications of Eleotin®, is Ji-Won Yoon, PhD. Dr. Yoon has been recognized with some of the highest awards in the medical profession. Presently he is a full Professor among the Faculty of Medicine

**Table 1**

On average, a Type II diabetic using Eleotin® will experience the following timeline of therapeutic benefits:

Type II Diabetes Severity	When Effect Is Felt	When Consumption Reduces
Mild (under 3 years)	1 to 3 Months	6 Months
Moderate (under 6 years)	3 to 6 Months	1 to 2 Years
Severe (over 6 years)	6 to 12 Months	Several Years



# Herbal Tea for NIDDM

at The University of Calgary. He holds double professorships in this Canadian university's Department of Microbiology and Infectious Diseases and in its Department of Pediatrics.

Furthermore, Dr. Yoon is Julia McFarlane Chair Professor and Director of the Diabetes Research Centre, Faculty of Medicine at The University of Calgary. Added to this, Dr. Yoon is Adjunct Full Professor in the Department of Microbiology and Immunology at The Chicago Medical School. Among others, he has received numerous grants-in-aid from the US National Institutes of Health for his studies on diabetes. While primarily specializing in Type II diabetes, Dr. Yoon's work also has encompassed insulin and Type I diabetes. However, the Eleotin® blended formulas that he helped to develop were not anticipated to increase insulin secretion in IDDM, but some Type I diabetic patients said it does.

A news release from the University of Calgary about Eleotin® published August 24, 1998 in the Canadian Province's daily newspaper, the *Alberta Report*, included an interview with Dr. Ji-Won Yoon. "We did the original laboratory work," the

diabetes expert said. "This remedy will restore near normalcy for 70% of Type II diabetics if it is employed within six months of onset in an adult subject."

And Dr. Yoon went on to state, "Most Type II diabetics who have suffered for three to five years will respond favorably if they take Eleotin® for eight to 12 months."<sup>28</sup>

## Identification of the Herbs in Eleotin®

This natural diabetes corrective contains dried roots, fruits, stems, and leaves taken from various botanicals. The dried herbal parts are combined together and ground up into a fine powder, packed in their respective boxes or pouches, and sold commercially. A diabetic is able to self-administer the powder in many ways which will be described in a later section.

Each of the parts of the eight botanicals is registered with various national and international pharmacopoeias to ensure both patient safety and therapeutic efficacy. The three herbal formulas are variable and changing, but their basic ingredients currently consist of:

- the root of *Platycodi radix*
- the fruit of *Schizandrae fructus*
- the stem of *Capsella bursa*
- the root of *Glycyrrhizae radix*
  - the root of *Astragalus membranaceus bunge*
  - the fruit of *Lycium Chinese*
  - the root of *Dioscorea japonica thunberg*

In the formulas' newest forms (experimental upgrading is ongoing), the therapeutic effects are faster than the original formulas of three years ago. Then it took six months before blood glucose levels dropped. During the course of upgrading the product's therapeutics, certain information was learned by the investigators and the product manufacturer. The newly developing information is offered below to patients who may be drinking this antidiabetic tea:

- People with severe diabetes requiring immediate results may increase the amount and frequency of consumption. Each time, one or two tea bags may be consumed. Also, the frequency may be increased on an empty stomach.
- Persons exhibiting a "weak stomach" should take a smaller amount of tea at the start and increase the dosage gradually.
- Others who suffer with severely impaired kidney or liver function should begin with a small dose of the herbs. After long term use of them, kidney and liver function has been observed to improve to a great extent.
- Although not containing toxic substances, no evaluation has been carried out to determine if the herbs are appropriate for usage by pregnant women. Judgments must be made by health professionals supervising pregnant patients who are diabetic.
- Being a food and restorative for the body in general, Eleotin® has demonstrated by laboratory animal testing that it is safe and benefits human metabolism.

## SMART NUTRIENTS

### A Guide to Nutrients That Can Enhance Intelligence and Reverse Senility by Dr. Abram Hoffer and Dr. Morton Walker

Issued as a quality paperback ISBN # 0-89529-562-8 by the Avery Publishing Group, Inc. under its new imprint, "A Dr. Morton Walker Book," 225 pages, US\$9.95 + US\$3.05 mail order postage and handling = US\$13.00 per book

- This book proves "senile" symptoms are unrelated to aging and may even be caused by well-meaning treatment.
- The stresses of modern life, the popularity of junk foods, and the pervasiveness of pollutants in the environment have more to do with senility than the simple fact of growing old.
- Nutritional therapy and the administration of vitamins, minerals, and other nutrients have halted, corrected or reversed senility in thousands of patients all over the world.
- Here you will learn the formerly unsuspected and invaluable properties of certain nutritional supplements.
- Basically, you'll discover that *lower intelligence and genuine senility* are both forms of nutrient malnutrition.
- Described are the physical and mental changes contributing to senility, how they get produced, and why innovative treatment explained here corrects the condition.
- The controversial drug GH3 which restores youthfulness and reverses the effects of aging is discussed by the authors.

PROVIDED in Smart Nutrients The full nutrition plan, complete lists of nutrients to avoid senility and raise intelligence, plus the food sources from which to get them.



ORDER FORM: Mail with correct payment to FREELANCE COMMUNICATIONS  
484 High Ridge Road, Stamford, Connecticut 06905-3020; Phone (203) 322-1551  
SMART NUTRIENTS... A Guide to Nutrients that Enhance Intelligence and Reverse Senility

1 book = US\$9.95 + US\$3.05 postage & handling = US\$13.00, sent Fourth class mail  
(To receive the book by US Priority Mail, add US\$3.05 more for special handling)  
2 - 24 books, deduct 20% = US\$7.97 per book + US\$2.05 per book for postage & handling  
25 - 99 books, deduct 30% = US\$6.97 per book + US\$1.05 per book for postage & handling  
100 books or more, deduct 40% = US\$5.97 per book = \$0.55 per book for postage & handling

My payment to FREELANCE COMMUNICATIONS, 484 High Ridge Rd., Stamford, CT 06905  
(Check or Money Order accepted, and no charge accounts, no returns, no refunds granted)

of US\$ \_\_\_\_\_ is enclosed for a \_\_\_\_\_ percent discount on \_\_\_\_\_ copies of  
SMART NUTRIENTS by Dr. Abram Hoffer and Dr. Morton Walker

My Name \_\_\_\_\_

Address \_\_\_\_\_

## Herbal Tea for NIDDM

- Of over 15,000 trials among 5,000 users, the product has shown no adverse side effects except for two people who reported mild and temporary constipation or diarrhea due to their sensitivity to the Eleotin® high fiber content. Their GI upset disappeared when these persons discontinued its use.
- Still, ingesting Eleotin® and oral hypoglycemic agents simultaneously may bring on blood glucose levels that are too low. It's best to reduce the drug dosage when such an effect shows up.
- Sensitivity to herbal ingredients is possible. To prevent any type of sensitivity reaction, the manufacturer recommends that Eleotin® be taken in small amounts at first while blood glucose levels are being monitored. Discontinue usage if high blood glucose levels present themselves and persist.

### Action Modes of the Herbal Therapy for Type II Diabetes

Eleotin® is effective in regulating blood glucose levels. It offers three different herbal formulas, A, B, and C, which are packed in pouches within their separate boxes for patient application. None of the formulas are contraindicated for use with present oral antidiabetic pharmaceuticals or insulin. The product's formulas can and should be taken in conjunction with present treatment. Over time, however, the patient will likely show less dependency on insulin and antidiabetic drugs. Clinical experience indicates that the herbs actually improve the efficacy of hypoglycemic drugs such as sulfonylureas, alpha-glucosidase, biguanides, and thiazolidinediones. Blood glucose levels should be monitored on a continuous basis.

Eleotin's® modes of action are dedicated to rejuvenating the pancreas and restoring health to a patient's insulin receptors in muscle and liver cells. Each eight-gram pouch inside its box provides either two medium-strong drinks or four weaker drinks of tea. The manufacturer recommends that the beginning user start at the weaker concentrations and work up gradually to the medium-strong drinks. If any discomfort is detected, reduce the drink strength for a while. In the event discomfort persists for an extended period, discontinue taking the herbal tea. Otherwise, drink the beverage five times daily.

The following information describes how the three forms of this new herbal therapy against diabetes is used:

**Formula (A):** At the rate of two drinks per day, from one-half to one-quarter of a pouch portion of the orange-colored herbs is utilized 30 minutes before eating any large meal such as lunch and dinner. A NIDDM patient uses formula A for lowering the blood glucose, which ordinarily spikes during the digestion of food. The boxed formula inhibits blood sugar breakdown and increases insulin secretion from the pancreas. Thus, box A furnishes temporary blood glucose control following a meal.

Although readily available, prescribed oral drugs do provide similar temporary relief from insulin secretion, Eleotin® creates this effect

naturally and safely without any type of toxicity. In contrast, toxicity is often associated with almost all antidiabetic pharmaceuticals.

**Formula (B):** Taken on an empty stomach at the rate of twice daily, brewed tea made from one-half to one-quarter of a pouch of selected and blended, green-colored herbs tends to upregulate the insulin receptors which have been functioning abnormally. The herbs in Formula B cause glucose to be more efficiently absorbed into the pancreas' beta cells and decrease a Type II patient's insulin resistance.

**Formula (C):** By furnishing nutrients designated specifically for the beta cells, one drink per day of the brewed tea steeped from one-quarter to one-half pouch of this formula of violet-colored herbs is taken for strengthening the pancreas itself. The beverage is sipped before bedtime in order to bring on a therapeutic effect during sleep. Thus, a total of five Eleotin® drinks are suggested to be consumed each day.

Separating the formulas into pouches within boxes and consuming their resultant brewed teas at the appropriate time intervals encourages more immediate results for the patient. ➤

## PUTTING IT ALL TOGETHER: THE NEW ORTHOMOLECULAR NUTRITION

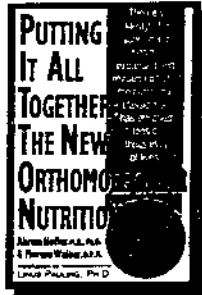
by

Abram Hoffer, M.D., Ph.D., and Morton Walker, D.P.M.

Introduction by Linus Pauling, Ph.D.

This all-inclusive, highly readable, 320-page, 5 1/2" x 8 1/2", quality paperback book, ISBN: 0-87983-633-4, is published by Keats Publishing, Inc. at \$17.95, plus \$3.05 for postage and handling, which totals US\$21.00 for one book.

Here is a greatly expanded and revised edition of the famous nutritional classic that has enriched millions of lives. In targeting those multiple hidden food allergies -- emerging as unsuspected causes of many degenerative diseases -- the authors lay out a comprehensive antistress nutritional supplement program, and show you the way to a longer and better enjoyed life.



1 Book=US\$21.00.

This book contains case histories, dietary information, nutritional values of more than 170 foods, nutrients to take against illnesses, and reveals the dangers of conventional drug treatment. Anyone who wants to know about the mandatory nutrition for optimal health should have the knowledge packed into **PUTTING IT ALL TOGETHER: The New Orthomolecular Nutrition.**

### ORDER FORM:

To receive a single, non-discounted copy of *The New Orthomolecular Nutrition*, send your request with cash, check written for US funds on a US bank, or a US Postal money order in the amount of US\$21.00 (no credit cards, no returns, no refunds) to **FREELANCE COMMUNICATIONS**, 484 High Ridge Road., Stamford, Connecticut USA 06905-3020. Allow 4 weeks for delivery of any size order.

Discount Schedule: 2-24 books = 20% off = US\$16.16/book + US\$2.05/book postage  
25-49 books = 30% off = US\$12.56/book + US\$1.55/book postage  
50-99 books = 40% off = US\$10.77/book + US\$1.05/book postage  
100 books or more = 50% off = US\$9.00/book + US\$0.55/bk postage

My payment of US\$\_\_\_\_\_ is enclosed for a \_\_\_\_\_ % discount on \_\_\_\_\_ copies of **PUTTING IT ALL TOGETHER: The New Orthomolecular Nutrition**

Name \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

# Herbal Tea for NIDDM

## How to Prepare Eleotin® Tea

As previously mentioned, the most effective preparation for Eleotin® is to handle it in the same manner as tea brewed from other Asian herbs. Thus, the best method for preparing these antidiabetic herbs is to brew the herbs and sip as tea. To proceed, here are several brewing techniques:

1. Slowly brew the powder in water over low heat to allow for the active ingredients to seep out into the water. The amount of water used depends on the drinker's preference - weak or medium or strong tea. The water must be reduced to a volume of 180 ml after brewing. The diabetic may either use less water to enjoy a strong taste or more water to create several weak quantities for drinking throughout the day. It doesn't matter which method is preferred; however, imbibing a greater daily quantity than the five drinks recommended does not necessarily mean better results.
2. A fast brewing technique involves placing the herbs into a thermos flask full of hot water, letting the tea steep in the closed thermos for 45 minutes, and then drinking the liquid as with any tea. Take note that swallowing the herbal sediment is advantageous because the whole beverage becomes more therapeutic that way.
3. The Eleotin® may be brewed in a pot for two to three hours.
4. It may be brewed in a microwave oven set at low heat for up to twenty minutes.
5. The actual ground powder of Eleotin® may be consumed directly without water or other liquid; yet, the absorption rate of the herbs' therapeutic components will be slower.
6. Abstain from or minimize alcoholic beverage intake when taking the product, because alcohol diminishes its effectiveness.

## NIDDM patients taking Eleotin® may expect to experience a number of therapeutic benefits such as:

- A. *Sleep improves* because
  1. Numbness and discomfort in the extremities goes away.
  2. Less urgency to urinate (nocturia) occurs.
  3. Daytime energy elevates for increased activity which advantageously fatigues the mind and body.
  4. Insomnia disappears for better overall metabolic function.
- B. *Sexual responsiveness improves* because
  1. Increased blood flow to the genitals occurs.
  2. The body's overall metabolic processes are restored.
- C. *Weight management sets in* because
  1. High fiber in the herbs controls the breakdown of carbohydrates into glucose and fat.
  2. Glucose gets turned into muscular energy.
- D. *Urination becomes more regular* because
  1. Eleotin® acts as a diuretic.
  2. Old insulin receptors get filtered out in the urine.
  3. New and fresh receptors grow and function better.
  4. Blood becomes cleansed by filtration through the kidneys.
- E. *There is no interaction with other foods* because
  1. Eleotin® is all natural.
  2. No need exists to follow a restrictive diet; even chocolate is allowed.
  3. Alcohol, being a drug rather than a food, definitely is restricted in its form of liquor, beer, wine, etc.
- F. *There is an increase in insulin secretion* because
  1. The Eleotin blend A formula is noted for this effect.
  2. Pancreatic health is rejuvenated, and the organ's beta cells produce greater amounts of insulin.

7. Continue with the standard level of prescribed medication, for it's up to the physician to make prescription alterations.

## Benefits the Type II Diabetic Can Expect from Eleotin®

Research conducted at The University of Calgary showed the blood glucose levels of all Type II diabetics to whom Eleotin® was administered experienced lowering of those levels over the course of therapy. A followup investigation indicated that patients using the product for a few months experienced a remarkable reduction of blood glucose, but the lower level did not drop below 128 mg/dl. Among the patients not on insulin in the followup study, blood glucose levels remained reasonably consistent for three months after termination of the Eleotin® treatment.

## Resource

In the United States and/or Canada, to acquire additional information about Eleotin® or to receive a supply of this antidiabetic product, contact the North American distributor: Haelan Products, Inc., 18568 - 142nd Avenue Northeast, Building F, Woodinville, Washington 98072; phone 800-542-3526; 425-482-2645; fax 425-258-2173.

## References

1. Broadhurst, C.L. Treating type II diabetes nutritionally. *Nutrition Science News*. 3(7):356-364, July 1998.
2. Anderson, R.A. Nutritional factors influencing the glucose/insulin system: chromium. *Journal of the American College of Nutrition*. 16:404-410, 1997.
3. Petersdorf, R. (ed.) *Harrison's Principles of Internal Medicine*, 10th ed. (New York, NY: McGraw-Hill, 1983).
4. *Diseases*. Second Edition. (Springhouse, Pennsylvania: Springhouse Corp., 1997), p. 1036.
5. Robbins, S.A. and Cotran, R. *Pathological Basis of Disease*. (New York, NY: W.B. Saunders, 1974).
6. Hughes, T., Gwynne, J., Switzer, B., et al., Effects of caloric restriction and weight loss on glycemic control, insulin release and resistance and atherosclerotic risk in obese patients with type II diabetes mellitus. *American Journal of Medicine*. 77:7-17, 1984.
7. Katan, M.B. Commentary. Fats for diabetics. *Lancet*. 343:1518, 1994.
8. Smith, U. Insulin resistance in obesity, type II diabetes and stress. *Acta Endocrinology supplement*. 262:67-69, 1984.
9. Krotkiewski, M.; Bjorntorp, P.; Sjostrom, L.; Smith, U. Impact of obesity on metabolism in men and women. *Journal of Clinical Investigation*. 72:1150-1162, 1983.
10. Dolhofer, R. and Wieland, O. Increased glycosylation of serum albumin in diabetes mellitus. *Diabetes*. 24:417-422, 1980.
11. Brownlee, M.; Vlassara, H.; Cerami, A. "Nonenzymatic glycosylation and the pathogenesis of diabetic complications. *Annals of Internal Medicine*. 101:710-713, 1984.
12. Sever, B.O. and Zahnd, G.R. Plants with oral hypoglycemic action. *Quarterly Journal of Crude Drug Research*. 17:139-196, 1979.
13. *Op. cit.*, *Diseases*, p. 1036.
14. *Ibid.*, p. 1037.
15. Murray, M. and Pizzorno, J. *Encyclopedia of Natural Medicine*. (Rocklin, CA: Prima Publishing, 1991), pp. 281 & 282.
16. Lininger, S.; Wright, J.; Austin, S.; Brown, D.; Gaby, A. *The Natural Pharmacy*. (Rocklin, CA: Prima Publishing, 1998), pp. 43 & 44.
17. Zhang, T.; Hoshino, M., et al. Ginseng root: Evidence for numerous regulatory peptides and insulinotropic activity. *Biomedical Research*. 11:49-54, 1990.
18. Suzuki, Y. and Hikino, H. Mechanisms of hypoglycemic activity of panaxana A and B, glycans of *Panax ginseng* roots: Effects on plasma levels, secretion, sensitivity and binding of insulin in mice. *Phytotherapy Research*. 3:20-24, 1989.
19. Waki, I.; Kyo, H., et al. Effects of a hypoglycemic component of ginseng radix on insulin biosynthesis in normal and diabetic animals. *Journal of Pharmacological Dynamics*. 5:547-554, 1982.
20. Sotaniemi, E.A.; Haapakoski, E.; Rautio, A. Ginseng therapy in non-insulin-dependent diabetic patients. *Diabetes Care*. 18:1373-1375, 1995.
21. Welihinda, J.; Arvidson, G.; Gylfe, E., et al. The insulin-releasing activity of the tropical plant *Momordica charantia*. *Acta Biologica Medicine Germ.* 41:1229-1240, 1982.
22. Keder, P. and Chakrabarti, C.H. Effects of bittergourd (*Momordica charantia*) seed and gibberellamide in streptozotocin induced diabetes mellitus. *Indian Journal of Experimental Biology*. 20:232-234, 1982.
23. Akhtar, M.S.; Athar, M.A.; Yaqub, M. Effect of *Momordica charantia* on blood glucose level of normal and alloxan-diabetic rabbits. *Planta Medica*. 42:205-212, 1981.
24. *Op. cit.*, Bever, B.O. and Zahnd, G.R., 1979.
25. Ribes, G.; Sauvage, Y.; Baccou, J.C., et al. Effects of fenugreek seeds on endocrine pancreatic secretions in dogs. *Annals of Nutritional Metabolism*. 28:37-43, 1984.
26. Baskaran, K.; Ahmath, B.K.; Shanmugasundaram, K.R.; Shanmugasundaram, E.R.B. Antidiabetic effect of a leaf extract from *Gynema sylvestre* in non-insulin-dependent diabetes mellitus patients. *Journal of Ethnopharmacology*. 30:295-305, 1990.
27. Shanmugasundaram, E.R.B.; Rajeswari, G.; Baskaran, K., et al. Use of *Gynema sylvestre* leaf extract in the control of blood glucose insulin-dependent diabetes mellitus. *Journal of Ethnopharmacology*. 30:281-294, 1990.
28. News release. A U of C treatment helps most Type II diabetics. *Alberta Report*, August 24, 1998, p. 14.

