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diabetes

A JOURNAL OF THE AMERICAN DIABETES ASSOCIATION®

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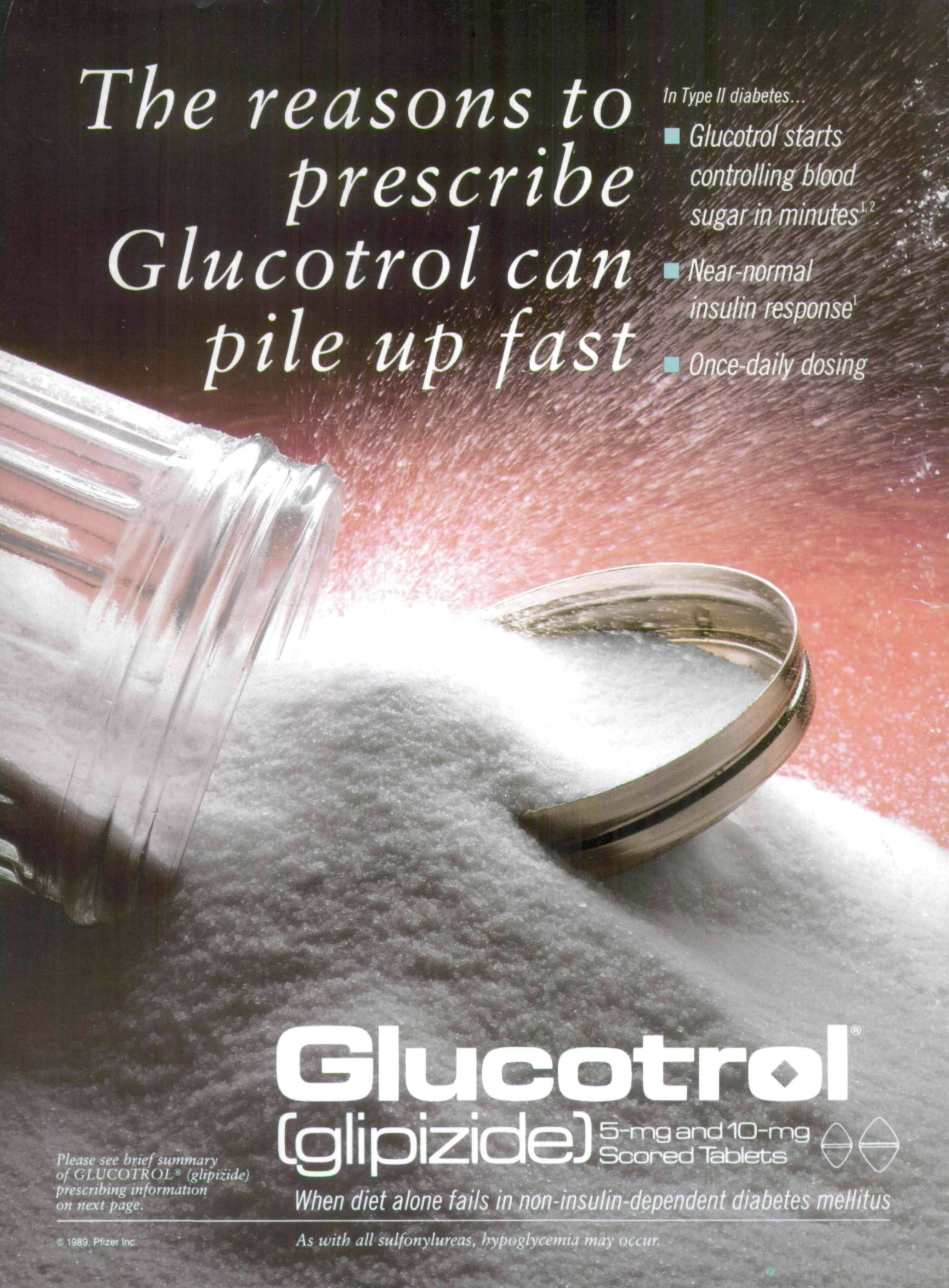
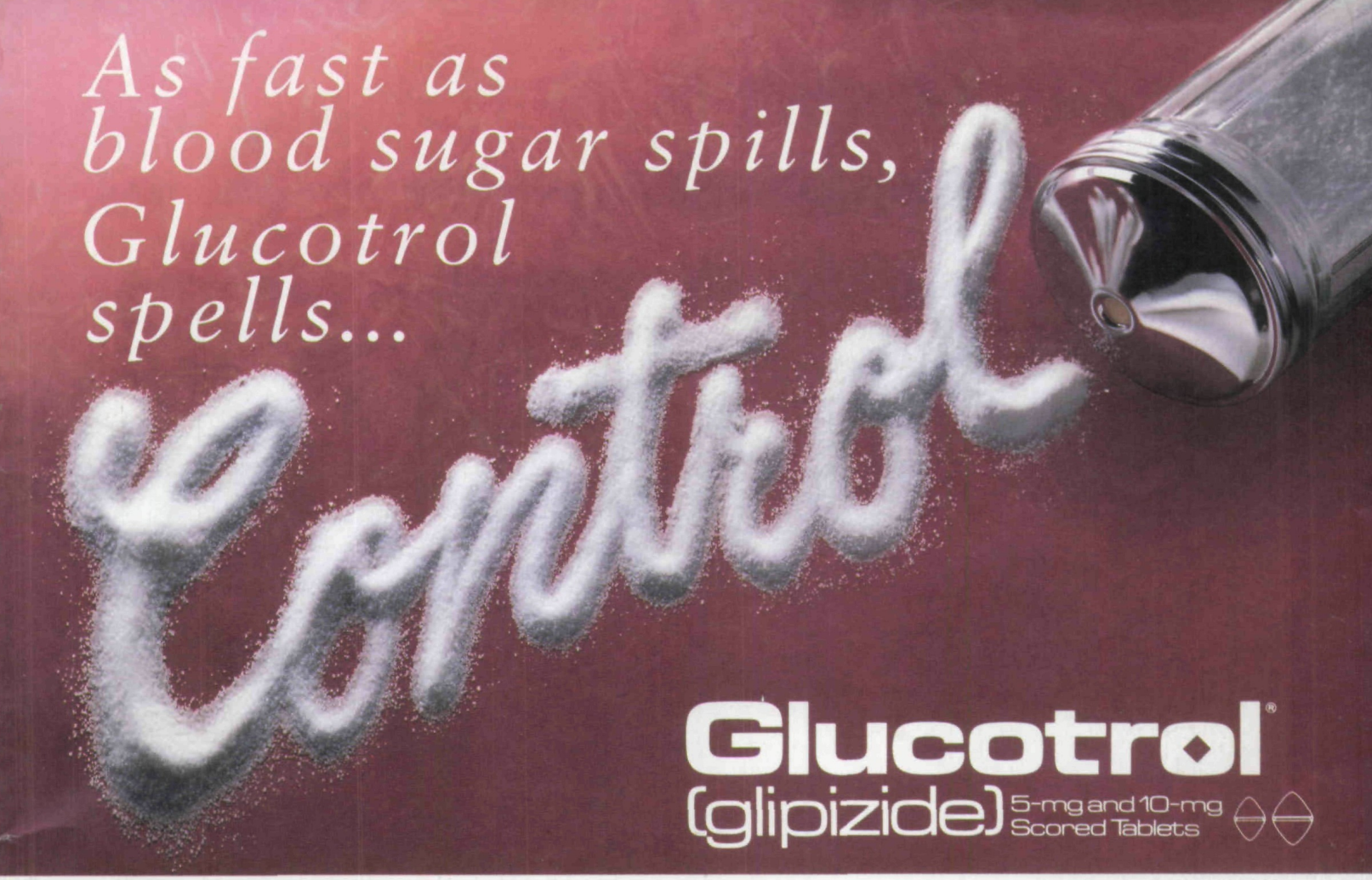

The reasons to prescribe Glucotrol can pile up fast
In Type II diabetes...
Glucotrol starts controlling blood sugar in minutes[1,2]
Near-normal insulin response[1]
Once-daily dosing
Glucotrol®
(glipizide) 5-mg and 10-mg Scored Tablets
When diet alone fails in non-insulin-dependent diabetes mellitus
As with all sulfonylureas, hypoglycemia may occur.
Please see brief summary of GLUCOTROL® (glipizide) prescribing information on next page.
© 1989, Pfizer Inc.



References: 1. Goebel R, Leb G: Effects of glyburide and glipizide on levels of immunoreactive insulin and blood sugar, in *Glipizide: A Worldwide Review*. Princeton, NJ, Excerpta Medica, 1984, pp 9-15. 2. Melander A, Wåhlin-Boll E: Clinical pharmacology of glipizide. *Am J Med* 1983;75:8-14.

Brief Summary of Prescribing Information

INDICATIONS AND USAGE: GLUCOTROL is indicated as an adjunct to diet for the control of hyperglycemia in patients with non-insulin-dependent diabetes mellitus (NIDDM, type II) after an adequate trial of dietary therapy has proved unsatisfactory.

CONTRAINDICATIONS: GLUCOTROL is contraindicated in patients with known hypersensitivity to the drug or with diabetic ketoacidosis, with or without coma, which should be treated with insulin.

SPECIAL WARNING ON INCREASED RISK OF CARDIOVASCULAR MORTALITY: The administration of oral hypoglycemic drugs has been reported to be associated with increased cardiovascular mortality as compared to treatment with diet alone or diet plus insulin. This warning is based on the study conducted by the University Group Diabetes Program (UGDP), a long-term prospective clinical trial designed to evaluate the effectiveness of glucose-lowering drugs in preventing or delaying vascular complications in patients with non-insulin-dependent diabetes. The study involved 823 patients who were randomly assigned to one of four treatment groups (*Diabetes*, 19, supp. 2:747-830, 1970). UGDP reported that patients treated for 5 to 8 years with diet plus a fixed dose of tolbutamide (1.5 grams per day) had a rate of cardiovascular mortality approximately 2-1/2 times that of patients treated with diet alone. A significant increase in total mortality was not observed, but the use of tolbutamide was discontinued based on the increase in cardiovascular mortality, thus limiting the opportunity for the study to show an increase in overall mortality. Despite controversy regarding the interpretation of these results, the findings of the UGDP study provide an adequate basis for this warning. The patient should be informed of the potential risks and advantages of GLUCOTROL and of alternative modes of therapy.

Although only one drug in the sulfonylurea class (tolbutamide) was included in this study, it is prudent from a safety standpoint to consider that this warning may also apply to other oral hypoglycemic drugs in this class, in view of their close similarities in mode of action and chemical structure.

PRECAUTIONS: Renal and Hepatic Disease: The metabolism and excretion of GLUCOTROL may be slowed in patients with impaired renal and/or hepatic function. Hypoglycemia may be prolonged in such patients should it occur.

Hypoglycemia: All sulfonylureas are capable of producing severe hypoglycemia. Proper patient selection, dosage, and instructions are important to avoid hypoglycemia. Renal or hepatic insufficiency may increase the risk of hypoglycemic reactions. Elderly, debilitated or malnourished patients and those with adrenal or pituitary insufficiency are particularly susceptible to the hypoglycemic action of glucose-lowering drugs. Hypoglycemia may be difficult to recognize in the elderly or people taking beta-adrenergic blocking drugs. Hypoglycemia is more likely to occur when caloric intake is deficient, after severe or prolonged exercise, when alcohol is ingested, or when more than one glucose-lowering drug is used.

Loss of Control of Blood Glucose: A loss of control may occur in diabetic patients exposed to stress such as fever, trauma, infection or surgery. It may then be necessary to discontinue GLUCOTROL and administer insulin.

Laboratory Tests: Blood and urine glucose should be monitored periodically. Measurement of glycosylated hemoglobin may be useful.

Information for Patients: Patients should be informed of the potential risks and advantages of GLUCOTROL, of alternative modes of therapy, as well as the importance of adhering to dietary instructions, of a regular exercise program, and of regular testing of urine and/or blood glucose. The risks of hypoglycemia, its symptoms and treatment, and conditions that predispose to its development should be explained to patients and responsible family members. Primary and secondary failure should also be explained.

Drug Interactions: The hypoglycemic action of sulfonylureas may be potentiated by certain drugs including nonsteroidal anti-inflammatory agents and other drugs that are highly protein bound, salicylates, sulfonamides, chloramphenicol, probenecid, coumarins, monoamine oxidase inhibitors, and beta-adrenergic blocking agents. *In vitro* studies indicate that GLUCOTROL binds differently than tolbutamide and does not interact with salicylate or dicumarol. However, caution must be exercised in extrapolating these findings to a clinical situation. Certain drugs tend to produce hyperglycemia and may lead to loss of control, including the thiazides and other diuretics, corticosteroids, phenothiazines, thyroid products, estrogens, oral contraceptives, phenytoin, nicotinic acid, sympathomimetics, calcium channel blocking drugs, and isoniazid. A potential interaction between oral miconazole and oral hypoglycemic agents leading to severe hypoglycemia has been reported. Whether this interaction also occurs with the intravenous, topical, or vaginal preparations of miconazole is not known.

Carcinogenesis, Mutagenesis, Impairment of Fertility: A 20-month study in rats and an 18-month study in mice at doses up to 75 times the maximum human dose revealed no evidence of drug-related carcinogenicity. Bacterial and *in vivo* mutagenicity tests were uniformly negative. Studies in rats of both sexes at doses up to 75 times the human dose showed no effects on fertility.

Pregnancy: Pregnancy Category C. GLUCOTROL (glipizide) was found to be mildly fetotoxic in rat reproductive studies at all dose levels (5-50 mg/kg). This fetotoxicity has been similarly noted with other sulfonylureas, such as tolbutamide and tolazamide. The effect is perinatal and believed to be directly related to the pharmacologic (hypoglycemic) action of GLUCOTROL. In studies in rats and rabbits no teratogenic effects were found. There are no adequate and well-controlled studies in pregnant women. GLUCOTROL should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Because recent information suggests that abnormal blood glucose levels during pregnancy are associated with a higher incidence of congenital abnormalities, many experts recommend that insulin be used during pregnancy to maintain blood glucose levels as close to normal as possible.

Nonteratogenic Effects: Prolonged severe hypoglycemia has been reported in neonates born to mothers who were receiving a sulfonylurea drug at the time of delivery. This has been reported more frequently with the use of agents with prolonged half-lives. GLUCOTROL should be discontinued at least one month before the expected delivery date.

Nursing Mothers: Since some sulfonylurea drugs are known to be excreted in human milk, insulin therapy should be considered if nursing is to be continued.

Pediatric Use: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS: In controlled studies, the frequency of serious adverse reactions reported was very low. Of 702 patients, 11.8% reported adverse reactions and in only 1.5% was GLUCOTROL discontinued.

Hypoglycemia: See PRECAUTIONS and OVERDOSAGE sections.

Gastrointestinal: Gastrointestinal disturbances, the most common, were reported with the following approximate incidence: nausea and diarrhea, one in 70; constipation and gastralgia, one in 100. They appear to be dose-related and may disappear on division or reduction of dosage. Cholestatic jaundice may occur rarely with sulfonylureas: GLUCOTROL should be discontinued if this occurs.

Dermatologic: Allergic skin reactions including erythema, morbilliform or maculopapular eruptions, urticaria, pruritus, and eczema have been reported in about one in 70 patients. These may be transient and may disappear despite continued use of GLUCOTROL; if skin reactions persist, the drug should be discontinued. Porphyria cutanea tarda and photosensitivity reactions have been reported with sulfonylureas.

Hematologic: Leukopenia, agranulocytosis, thrombocytopenia, hemolytic anemia, aplastic anemia, and pancytopenia have been reported with sulfonylureas.

Metabolic: Hepatic porphyria and disulfiram-like alcohol reactions have been reported with sulfonylureas. Clinical experience to date has shown that GLUCOTROL has an extremely low incidence of disulfiram-like reactions.

Endocrine Reactions: Cases of hyponatremia and the syndrome of inappropriate antidiuretic hormone (SIADH) secretion have been reported with this and other sulfonylureas.

Miscellaneous: Dizziness, drowsiness, and headache have each been reported in about one in fifty patients treated with GLUCOTROL. They are usually transient and seldom require discontinuance of therapy.

OVERDOSAGE: Overdosage of sulfonylureas including GLUCOTROL can produce hypoglycemia. If hypoglycemic coma is diagnosed or suspected, the patient should be given a rapid intravenous injection of concentrated (50%) glucose solution. This should be followed by a continuous infusion of a more dilute (10%) glucose solution at a rate that will maintain the blood glucose at a level above 100 mg/dL. Patients should be closely monitored for a minimum of 24 to 48 hours since hypoglycemia may recur after apparent clinical recovery. Clearance of GLUCOTROL from plasma would be prolonged in persons with liver disease. Because of the extensive protein binding of GLUCOTROL, dialysis is unlikely to be of benefit.

DOSAGE AND ADMINISTRATION: There is no fixed dosage regimen for the management of diabetes mellitus with GLUCOTROL; in general, it should be given approximately 30 minutes before a meal to achieve the greatest reduction in postprandial hyperglycemia.

Initial Dose: The recommended starting dose is 5 mg before breakfast. Geriatric patients or those with liver disease may be started on 2.5 mg. Dosage adjustments should ordinarily be in increments of 2.5-5 mg, as determined by blood glucose response. At least several days should elapse between titration steps.

Maximum Dose: The maximum recommended total daily dose is 40 mg.

Maintenance: Some patients may be effectively controlled on a once-a-day regimen, while others show better response with divided dosing. Total daily doses above 15 mg should ordinarily be divided.

HOW SUPPLIED: GLUCOTROL is available as white, dye-free, scored, diamond-shaped tablets imprinted as follows: 5 mg tablet—Pfizer 411 (NDC 5 mg 0049-4110-66) Bottles of 100; 10 mg tablet—Pfizer 412 (NDC 10 mg 0049-4120-66) Bottles of 100.

CAUTION: Federal law prohibits dispensing without prescription.

More detailed professional information available on request.

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New York, New York 10017

SEPTEMBER AUTHOR INDEX
(Volume 39, Number 9)

diabetes

A JOURNAL OF THE AMERICAN DIABETES ASSOCIATION®

***Diabetes* publishes original research about the physiology and pathophysiology of diabetes mellitus. Submitted manuscripts can report any aspect of laboratory, animal, or human research. Emphasis is on investigative reports focusing on areas such as the pathogenesis of diabetes and its complications, normal and pathologic pancreatic islet function and intermediary metabolism, pharmacological mechanisms of drug and hormone action, and biochemical and molecular aspects of normal and abnormal biological processes. Studies in the areas of diabetes education or the application of accepted therapeutic and diagnostic approaches to patients with diabetes mellitus are not published.**

***Diabetes Care* publishes original articles and reviews of human and clinical research intended to increase knowledge, stimulate research, and promote better management of people with diabetes mellitus. Emphasis is on human studies reporting on the pathophysiology and treatment of diabetes and its complications; genetics; epidemiology; psychosocial adaptation; education; and the development, validation, and application of accepted and new therapies. Topics covered are of interest to clinically oriented physicians, researchers, epidemiologists, psychologists, diabetes educators, and other professionals.**

All manuscripts and other editorial correspondence should be sent by first-class mail to R. Paul Robertson, MD, University of Minnesota, P.O. Box 731, Minneapolis, MN 55440-0731. Express mail or correspondence requiring a street address should be addressed to R. Paul Robertson, MD, Phillips-Wangensteen Building, Room 6-124, 516 Delaware Street, SE, Minneapolis, MN 55455.

Diabetes publishes only original material. When submitting a manuscript, authors must state in their transmittal letter that the material has not been published or submitted simultaneously to another journal. Accepted manuscripts incur a charge of $25 per printed page.

Manuscripts should be prepared in accordance with the requirements specified in the document "Uniform Requirements for Manuscripts Submitted to Biomedical Journals," *Annals of Internal Medicine* 96:766–71, 1982. An "Instructions for Authors" page containing specifications for manuscript preparation appears in the January and July issues of each volume.

Diabetes (ISSN 0012-1797) is published monthly by the American Diabetes Association, Inc., 1660 Duke Street, Alexandria, Virginia 22314. Professional membership dues include $50 designated for *Diabetes*. Subscription rates for nonmembers: $90 for 1 year/$159 for 2 years in the United States and Canada; $132 for 1 year/$233 for 2 years in all other countries. Individual copies: $10 in the United States and Canada; $12 in all other countries. Second-class postage paid at Alexandria, Virginia 22314, and at additional mailing offices. POST MASTER: Send change of address to *Diabetes,* American Diabetes Association, P.O. Box 2055, Harlan, IA 51593-0238.

Diabetes is listed in *Science Citation Index, MEDLARS, Index Medicus,* and *Current Contents* (*Basic Science* and *Clinical Medicine*) data bases and *Automatic Subject Citation Alert. Diabetes* is available on-line on *BRS Colleague* (for more information, call 800-468-0908) and in machine-readable format from University Microfilms International. *Diabetes* is printed on acid-free paper starting with Vol. 37, 1988.

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1. Jovanovic-Peterson L., Peterson C., Dudley J., Kilo C., Ellis B.: Identifying sources of error in self-monitoring of blood glucose. Diabetes Care 1988; 11 (10) 791-794.

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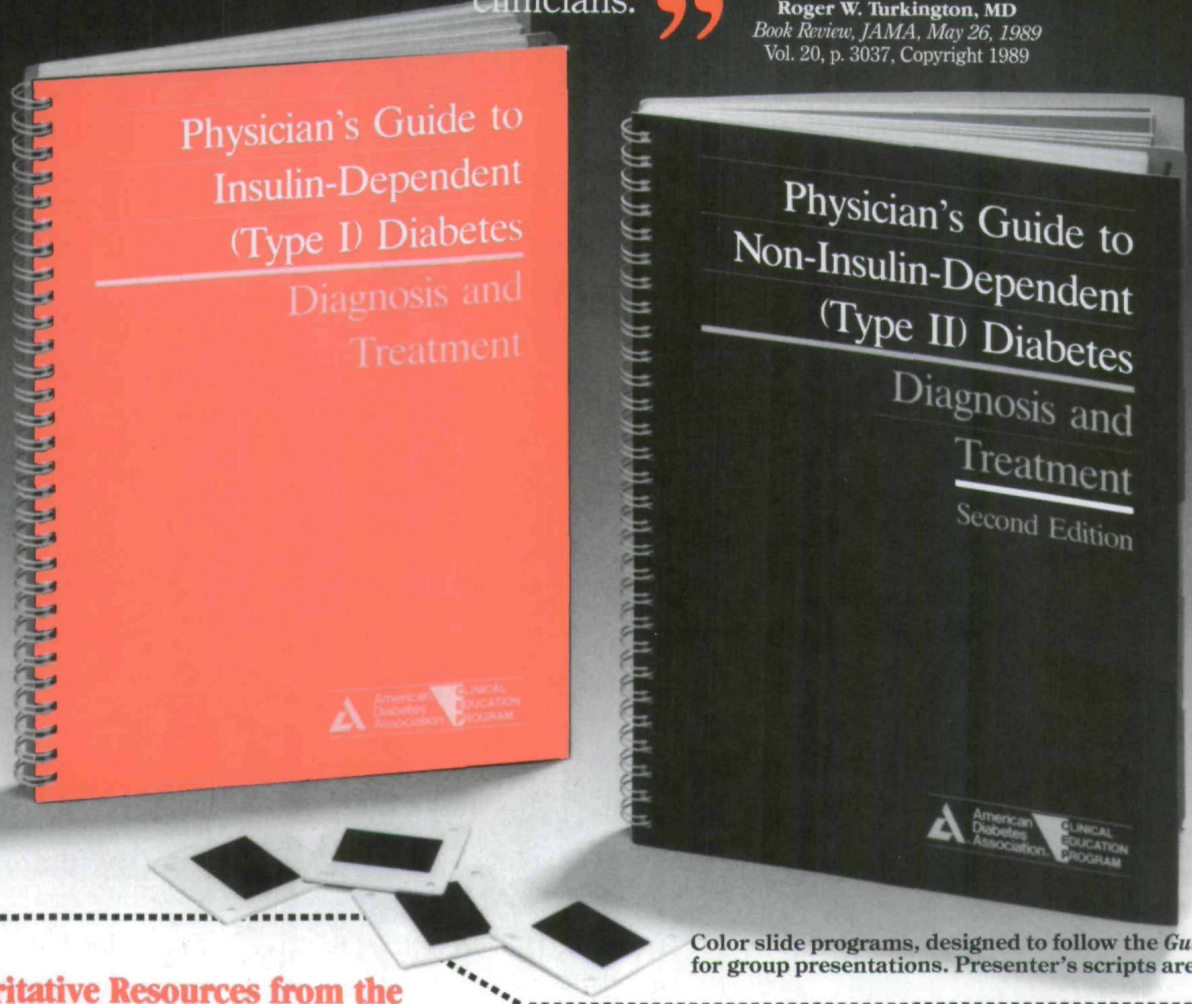
"These manuals contain concepts that are essential to the education of every person who undertakes the care of persons with diabetes mellitus. They are highly recommended for medical students, resident physicians, and nurse clinicians."

Roger W. Turkington, MD
Book Review, JAMA, May 26, 1989
Vol. 20, p. 3037, Copyright 1989



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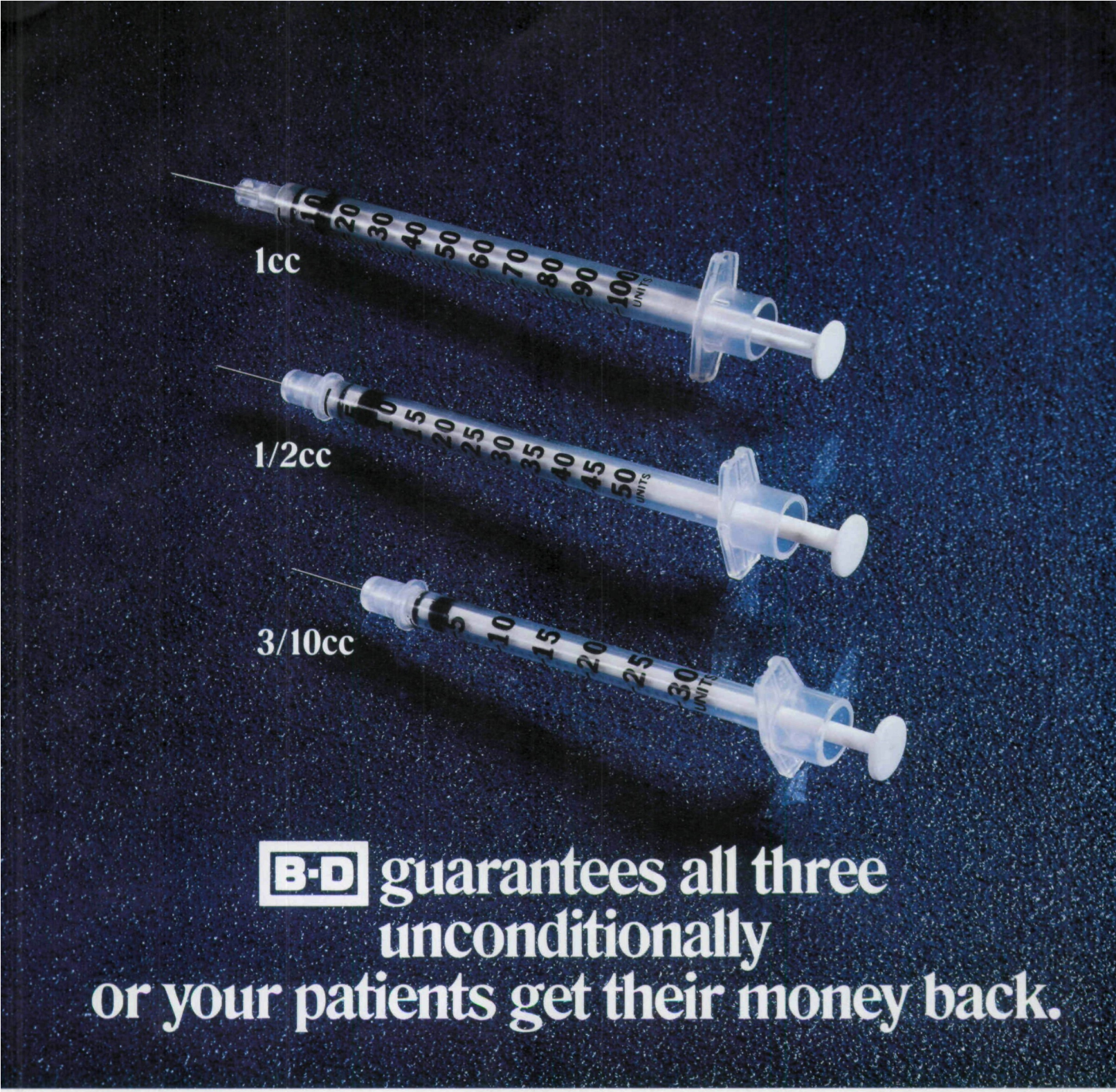

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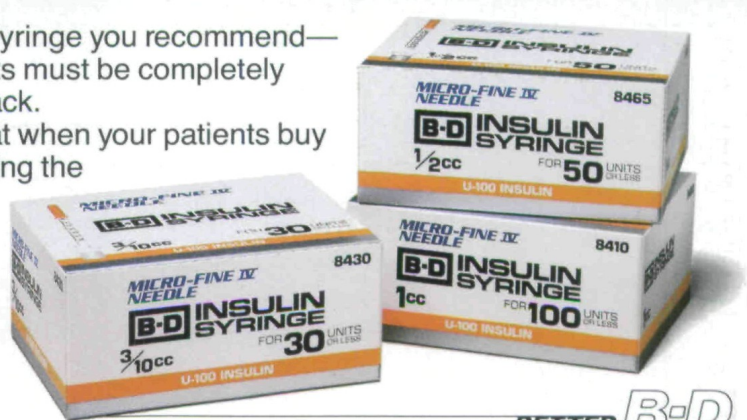

BETTER B-D DIABETES CARE

Announcing

American Diabetes Association's

38th Postgraduate Course

January 9-12, 1991
San Diego Marriott Hotel and Marina
San Diego, California

Diabetes in the '90s: Challenges in Clinical Management

Course Information

Course Format and Topics
This year's Postgraduate Course format includes plenary sessions, concurrent sessions, and hands-on workshops. The following is a partial listing of topics that will be presented:

- NIDDM: Challenges of the Next Decade
- Insulin Therapy
- Lipids, Vascular Disease, and NIDDM
- Nutrition Management
- The Diabetic Foot
- Diabetes in the Elderly Population
- Effective Treatment Strategies in Minorities
- Cost-Effective Diagnosis of Complications

ADA Recognition Conference
An eight-hour conference, Meeting the National Standards for Diabetes Patient Education Programs and Applying for ADA Recognition, will be held at the San Diego Marriott on Wednesday, January 9, and Thursday, January 10. For more details and registration information, call 703/549-1500, extension 214.

AADE Advanced Studies Institute for Diabetes Education (ASIDE)
The ASIDE Program will be offered during the 38th Postgraduate Course. Enrollment is limited by both the entry requirements and the educational design of the courses. For further information, call the AADE national office at 312/661-1700.

Continuing Education
The 38th Postgraduate Course is approved for continuing medical education credits.

General Information

Registration
The registration fee for the Postgraduate Course (see schedule below) includes the course syllabus and admission to all sessions, commercial exhibits, and social events. Guest registration will admit individuals to the exhibit floor and social functions only. Register early to receive significant savings.

	Early Bird before 11/16	Preregistration before 12/14	Registration Paid at Door
Professional Member (MD)	$250	$275	$295
Professional Member (non-MD)	125	145	170
Nonmember	285	325	350
Student	30	35	40

Exhibits
Time is included in the course program for attendees to visit the commercial exhibits to review the latest developments in products and services for the treatment of diabetes. Exhibits will be open:

Thursday, January 10
7:30 am-2:00 pm

Friday, January 11
7:30 am-1:30 pm

NO ONE UNDER 16 YEARS OF AGE WILL BE PERMITTED IN THE EXHIBIT HALL.

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AMERICAN DIABETES ASSOCIATION • 38TH POSTGRADUATE COURSE • JANUARY 9-12, 1991

ROOM TYPE	RATE	NUMBER OF ROOMS
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Requests prior to and after convention dates will be accepted on a space-available basis only. Convention rate applies two days prior and two days following official meeting date.		
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Additional Occupants: _____ _____
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ADA 38th Postgraduate Course (January 9-12, 1991)

PREREGISTRATION FORM

American Diabetes Association.

Please register only one person per form. This form can be copied for additional registrants.

1. Academic degree(s): ☐ MD ☐ DO ☐ PhD ☐ RN ☐ RD ☐ Other ____

First Name, M.I., Last Name

Nickname (as you want name to appear on your badge)

Professional Affiliation

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3. If you join ADA now, you can register at the member rate and save!

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See brochure for registration fees

†*Verification of status must be included with registration in order for it to be processed.*

4. Workshop Preference. Select first and second choices each day. Please refer to the workshop portion of this brochure for information.

Thursday, January 10 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
Friday, January 11 ☐ 6 ☐ 7 ☐ 8 ☐ 9

5. Specialty Area (check one):

☐ a. Adult Endocrinology
☐ b. Family Practice
☐ c. Geriatrics
☐ d. Internal Medicine
☐ e. Nursing
☐ f. Nutrition
☐ g. Ophthalmology
☐ h. Ob/Gyn
☐ i. Pediatrics
☐ j. Pediatric Endocrinology
☐ k. Pharmacology
☐ l. Podiatry
☐ m. Psychology
☐ n. Public Health
☐ o. Research
☐ p. Other ____ (please indicate)

6. Type of Practice (check one):

☐ a. Clinic
☐ b. Corporate
☐ c. Hospital
☐ d. Private Practice
☐ e. Public Health
☐ f. Research
☐ g. Student
☐ h. Academic
☐ i. Other ____ (please indicate)

Register by *Nov. 16* to Take Advantage of Early-Bird Registration Rates!*

7. Previous Postgraduate Courses attended

1990	1989	1988	1987

8. Previous Annual Meetings attended

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9. Registration fee submitted $ ____

10. Membership fee included (be sure to include membership application and a separate check for your payment) $ ____

11. Total $ ____ Date ____

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Cancellation Policy: The registration fee, less a cancellation fee of $50.00 (student cancellation fee of $15.00) will be refunded on written request postmarked by January 31, 1991. No refunds will be made after that date.

*Registration must be postmarked by the preregistration cut-off to receive reduced fees.

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TEN IN CLINICAL RESEARCH

Gerhard Baumann, MD
Mark E. Molitch, MD
"Growth hormone binding protein/receptor in diabetes mellitus"
Northwestern University Medical School, Chicago, IL

Paul J. Beisswenger, MD
"Advanced glycosylation end-products, Amadori products and glycemic control in IDDM"
Dartmouth Hitchcock Medical Center, Hanover, NH

David L. Cook, RN, BSN, CDE
"Comparison of diabetes care in two Washington State home health care agencies"
VNA Home Health Care Services, Spokane, WA

Linda B. Haas, MN, RN, CDE
Jerrie A. Larsen, MA, RN
"Prevention of lower extremity amputations associated with diabetes mellitus in high risk veterans"
Seattle Veterans Affairs Medical Center, Seattle, WA

Harumi L. Hachiya, MD
"Angiogenin in diabetic retinopathy"
University of Michigan Medical Center, Ann Arbor, MI

Christopher L. Krogh, MD, MPH
"Diabetes among the Paipai: a tribe in transition"
University of Minnesota Medical School, Minneapolis, MN

Gary R. Matzke, PharmD, FCP, FCCP
"Influence of Type I and Type II diabetes on the expression of genetic polymorphic drug metabolism"
University of North Carolina School of Pharmacy, Chapel Hill, NC

John E. Nestler, MD
"An examination of the effect of hyperinsulinemia on vascular permeability"
Medical College of Virginia, Richmond, VA

Craig C. Porter, MD
"MHC class III genetic analyses in insulin dependent diabetes mellitus"
The Johns Hopkins University School of Medicine, Baltimore, MD

Eric Ravussin, PhD
"Relationship between lipoprotein lipase activity, lipoprotein lipase gene expression, insulin resistance, and obesity in Pima Indians"
National Institutes of Health/NIDDK, Phoenix, AZ

TWELVE IN EDUCATION

Sheila Beckham, RD, MPH
"Malama Ola diabetes program"
University of Hawaii School of Public Health, Honolulu, HI

Jean E. Betschart, MN, RN, CDE
"Development and evaluation of a progressive-learning workbook on IDDM for school-age children"
Children's Hospital of Pittsburgh, Pittsburgh, PA

Patricia Carson, RN, MA, CDE
"Development, implementation and evaluation of a collaborative recognition program for diabetes patient education"
Princeton Diabetes Treatment and Education Center, Princeton, NJ

Anne C. Cottone, BSN, RN
Barbara A. Ryan, BSN, RN, CDE
"The initial psychological impact of the diagnosis of IDDM in the toddler on his/her parents"
Adelphi University Graduate Nursing Department, Garden City, NY

Laura C. Dzurec, PhD, RN
"Diabetic patients' perceptions of the teaching role of the home health care nurse"
Ohio State University College of Nursing, Columbus, OH

Fran Hengel, MS, RD
"Foot screening and foot care education for the diabetic patients seen in field clinics"
PHS Indian Hospital, Rosebud, SD

Audrey A. Irvine, PhD
Jon Terry Saunders, PhD
"Gender differences in sex role expectations for social support and impact on diabetes outcomes in a Type II population"
Blue Ridge Hospital/University of Virginia, Charlottesville, VA

Judy Ostrom Joynes, RN, MA, CDE
"Comparison of computerized and non-computerized diabetes management system in a formalized education and management program in insulin intensification"
International Diabetes Center, Minneapolis, MN

Donna M. Murphy, RN, MS, CDE
Joanne T. Marengo, PhD
"The assessment of restored cognitive function posthypoglycemia in adolescents with IDDM"
Chicago Children's Diabetes Center/Northwestern University Medical School, Chicago, IL

Paulette O'Connell, RSM, MSN, RN, CDE
"Diabetes support group for mentally handicapped young adults"
Mercy Hospital and Medical Center/Diabetes Treatment Center, Chicago, IL

Karen Johnson Ranen, RN, BS, CDE
"The relationship between age, self-esteem and self-care in male adolescents with diabetes mellitus"
University of Massachusetts School of Nursing, Amherst, MA

Melissa Ann Spezia, RN, MSN
"Family functioning and self-care activities in school-age children with diabetes"
Southeast Missouri State University Department of Nursing, Cape Girardeau, MO

FOURTEEN IN BASIC RESEARCH

F. Joy Archer, VMD, PhD
John W. Kramer, DVM, PhD
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VOLUME 13 NUMBER 9 REVIEW ISSUE SEPTEMBER 1990

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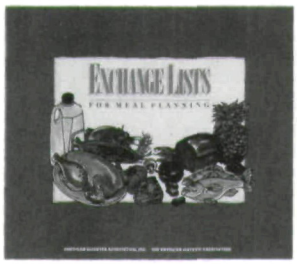

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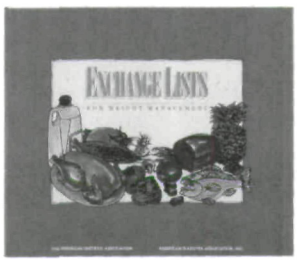

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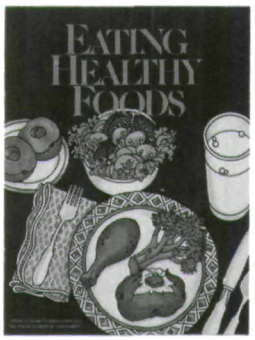

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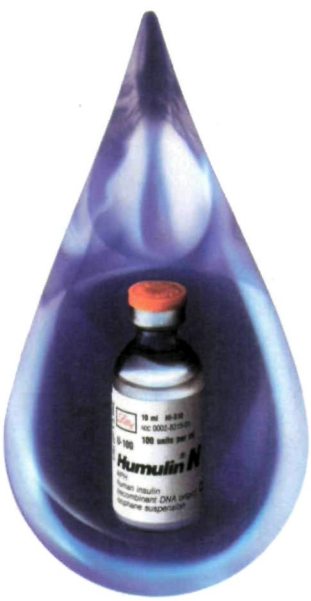

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