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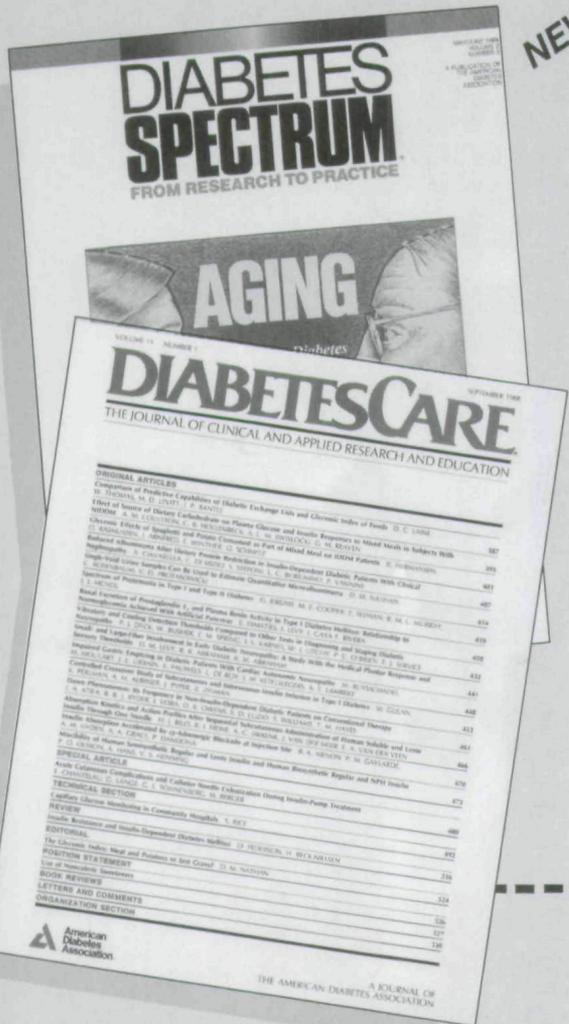
Written for professionals who work day-to-day on the front line of diabetes treatment, DIABETES SPECTRUM translates the latest research into practical applications for their practice. Upcoming issues of DIABETES SPECTRUM will feature in a 30+ page Research to Practice Section that can be detached and saved for future reference. Topics in this section for 1990 will focus on: Obesity and Weight Control—Hypoglycemia—Control and Complications—the Diabetic Foot—Exercise.

Each issue will also contain a question and answer column, legal and legislative updates, book reviews, Letters to the Editors, and ADA Position Statements. Plus, you'll enjoy Spectrum Notes, highlighting individuals developing new techniques, awards, and other happenings in the diabetes field. Be the first to subscribe to this exciting new ADA publication!

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DIABETES CARE offers valuable insights on such critical areas of concern as the reduction in cardiovascular risk factors with intensive diabetes treatment in NIDDM, effect of temperament on metabolic control in children with diabetes mellitus, alcohol abuse and diabetic ketoacidosis, relationship of body fat distribution patterns to atherogenic risk factors in NIDDM, and much more.



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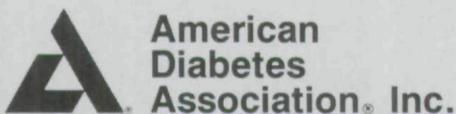
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DIABETES CARE[®]

THE JOURNAL OF CLINICAL AND APPLIED RESEARCH AND EDUCATION

REVIEW ISSUE

ORIGINAL ARTICLES

Treatment of NIDDM With Insulin Agonists or Substitutes

J.A. GALLOWAY 1209

Insulin Use in NIDDM

S. GENUTH 1240

Intensive Insulin Therapy for Treatment of Type I Diabetes Mellitus

I.B. HIRSCH, R. FARKAS-HIRSCH, J.S. SKYLER 1265

VOLUME INDEXES

ORGANIZATION SECTION

SYSTÈME INTERNATIONAL (SI) UNITS TABLE

14th International Diabetes Federation Congress

June 23-28, 1991
Washington, D.C.

The 14th IDF Congress program will consist of three separate program tracks.

- Public Awareness, Fund Raising, and Association Management
- Scientific and Clinical
- Clinical Care, Health-Care Delivery, and Education

Program Format

Sessions will be held daily beginning Monday, June 24, 1991 through Friday, June 28, 1991.

The anticipated schedule of events is:

Interest Group	07:00—08:00,
Open Forum:	Monday through Friday
Plenary	08:00—09:00,
Lectures:	Monday through Friday 16:15—17:15, Monday through Friday
Symposia:	09:15—11:15, Monday through Friday 14:00—16:00, Tuesday and Thursday
Abstract (Oral) Presentations:	14:00—16:00, Monday, Wednesday, and Friday
Meet the Expert:	12:00—13:00, Monday through Friday
Poster Presentations:	11:30—14:00, Monday through Friday



The White House (South Lawn)

*Home of the President
of the United States.*

Public Awareness, Fund Raising, and Association Management Program

The 14th IDF Congress program has been expanded this year to include a separate track for individuals in the diabetes community not professionally associated with the scientific, clinical care, medical, or health-care delivery fields. Topics will cover the issues of public awareness for diabetes, fund raising, association management, government relations, and youth services.

- Audience Identification for Public Awareness
- Development of a Public-Awareness Program
- Role of Nongovernmental Organizations in Generating Public Awareness
- How to Recruit and Train Individuals for Fund Raising
- Tactics for Fund Raising

- Strategies for Raising Funds in Diverse Countries
- Why Have an Association?
- Health Professionals and Lay Members—Achieving a Balance
- Present Structural Models
- Government and Association Relationships
- How the IDF, National Diabetes Organizations, and Other Organizations Interact With Governments
- How Can Governments Prevent Discrimination?
- Development of Youth as Future Association Leaders
- Camping
- Innovations in Addressing the Special Needs of Youth

Scientific and Clinical Program

This section of the program will include sessions covering the full range of research areas in diabetes from basic to clinical science.

Topics will include:

- Physiology of Insulin Action in Muscle
- Receptor Signaling
- Postreceptor Signaling
- Glucose Transport and Transporters
- Postprandial Fuel Disposition
- Gene Regulation in Insulin Action
- Phospholipid Signaling
- Islet Transplantation
- Pancreas Transplantation
- Biophysical and Ionic Aspects of β -Cell Functioning
- Phospholipid-Related Factors in β -Cell Function
- Phosphorylation-Related Factors in β -Cell Function
- Islet Cell Gene Expression and Hormone Synthesis
- Effects of Hyperglycemia on Insulin Secretion and Action
- Fuels and Hormones in Fetal Development
- Biochemistry of Complications
- Diabetic Retinopathy: Mechanisms
- Diabetic Nephropathy: Pathophysiology
- Autonomic Nervous System (ANS) Neuropathy
- Somatosensory Polyneuropathy
- Hyperlipidemia and Diabetes
- Atherosclerosis and Diabetes: Mechanisms
- Endothelial Cell Function in Metabolism
- Cell Biology of Nephropathy
- Diabetic Nephropathy: Biochemical Mechanisms
- Epidemiology of Vascular Complications
- Mechanisms of Hypertension in Diabetes

- Immune Mechanisms in IDDM
- Insulin Analogues, Chemistry, and Action
- Transgenic Mouse Models
- Genetics of IDDM
- Immunotherapy and Prediction of Diabetes
- Animal Models of IDDM
- Effects and Mechanisms of Action Growth Factors
- Obesity and Thermogenesis
- Islet Pathology in NIDDM
- Neuroregulation
- Pathophysiology of NIDDM
- Animal Models of NIDDM
- Ketogenesis
- Genetics of NIDDM
- Brain Regulation of Carbohydrate Metabolism
- Modeling and Glucose-Insulin Kinetics
- Brain and Gastrointestinal Peptides
- Regulation of Protein Metabolism
- Lipoprotein Physiology

Clinical Care, Health-Care Delivery, and Education Program

This section of the program will provide a comprehensive coverage of the areas of Clinical Care, Health-Care Delivery, and Education in the field of diabetes. Sessions will be of interest to physicians, educators, and health-care professionals. Topics will include:

- Comparative Systems of Health-Care Delivery
- Retinopathy
- Foot Problems
- Nutritional Issues in Diabetes
- Innovative and Nontraditional Approaches to Education
- Economics of Diabetes and Access to Care
- Standards: Screening, Diagnosis, Practice
- Neuropathy
- Educating the Educator
- Pregnancy and Gestational Diabetes
- Diabetes in Adolescents
- From Research to Clinical Practice

- Technology Development, Transfer, and Utilization
- Diabetes Health Promotion
- Nephropathy
- Malnutrition-Related Diabetes
- High-Risk and Special Populations
- Epidemiology of IDDM
- Immunotherapy
- Obesity
- Nutritional Issues in Diverse Countries
- Reducing Cardiovascular Risk Factors
- Macrovascular Disease
- Psychosocial and Behavioral Aspects of Insulin Therapy
- Women's Issues
- Pharmacologic Approaches to Blood Glucose Control
- Strategies for Educating Low-Literacy Patients
- Sexual Issues
- Stress and Diabetes
- Self-care, Home-Care, and Independence
- Management of Acute Complications
- Overcoming Obstacles to Health-Care Delivery
- Epidemiology of NIDDM
- Overlooked Complications of Diabetes
- Insulin-Delivery Systems
- Strategies for Patient Education
- Exercise

IDF Satellite Symposia

For more information regarding topics, dates, locations, and fees for IDF satellite symposia, please see the registration form on the following pages.

ACCOMMODATIONS

1. All accommodations in participating hotels must be reserved through the IDF Congress Meeting Manager.
2. All accommodations will be assigned in order of receipt of the Registration Form and payment, so enroll early to ensure your hotel preference.
3. If you wish to share accommodations, please mail your registration form together with the registration form(s) of the individual(s) with whom you wish to share. Shared accommodations cannot be confirmed until registration forms from all occupants have been received. Shared accommodations between individuals unknown to one another cannot be made.
4. The US\$150 deposit per room must be paid with your Registration Fee. The balance of your payment must be made to the hotel to which you are assigned. The deposit will be forfeited if the room is not occupied on the advised date of arrival.
5. Please indicate in the appropriate square on your registration form your first, second, and third preferences for accommodations.
6. Confirmation of your accommodations will be forwarded to you in writing with acknowledgement of your registration and payment.

Accommodations Reservations will not be accepted by the IDF Congress Meeting Manager after April 30, 1991.

7. After April 30, 1991:
 - a. your deposit is not refundable by the IDF Congress Meeting Manager.
 - b. any cancellation of accommodations should be made directly with the hotel to which you are assigned, with copy of such notification to the IDF Congress Meeting Manager.

Accommodations have been reserved at convention rates on behalf of IDF Congress registrants at the following locations. Please note that the room rates do not include tax.

Hotels

	Single*	Double*
A. Capital Hilton	\$145	\$165
B. Comfort Inn Downtown	\$ 84	\$ 97
C. Days Inn Downtown	\$ 73	\$ 75
D. Dupont Plaza Hotel	\$120	\$140
E. Governor's House Holiday Inn	\$110	\$115
F. Grand Hyatt Washington (IDF Headquarters)	\$165	\$190
G. Henley Park Hotel	\$145	\$165
H. Highland Hotel	\$115	\$130
I. Holiday Inn Capitol Hill	\$105	\$125
J. Holiday Inn Central	\$103	\$115
K. Holiday Inn Crowne Plaza	<i>Regular</i> \$135	\$155
	<i>Deluxe</i> \$150	\$170
	<i>Concierge</i> \$165	\$185
L. Holiday Inn Thomas Circle	\$ 87	\$ 97
M. Hyatt Regency Washington	\$159	\$179
N. JW Marriott (Co-Headquarters)	\$157	\$167
O. Mayflower Hotel	<i>Regular</i> \$105	\$105
	<i>Deluxe</i> \$150	\$150
P. Normandy Inn	\$ 70	\$ 80
Q. Omni Shoreham Hotel	\$150	\$170
R. Phoenix Park Hotel	\$125	\$135
S. Quality Hotel Capitol Hill	\$ 92	\$107
T. Radisson Park Terrace	\$135	\$155
U. Ramada Renaissance Techworld (Co-Headquarters)	<i>Regular</i> \$140	\$160
	<i>Renaissance Club</i> \$160	\$180
V. Sheraton Washington	<i>Regular</i> \$136	\$160
	<i>Deluxe</i> \$148	\$173
	<i>Park Tower</i> \$156	\$181
	<i>Wardman Tower</i> \$177	\$202
W. Vista International Hotel	<i>Regular</i> \$153	\$173
	<i>Executive</i> \$178	\$198
X. Washington Court Hotel	\$160	\$175
Y. Washington Plaza Hotel	\$ 98	\$108
Z. Willard Intercontinental	\$190	\$220

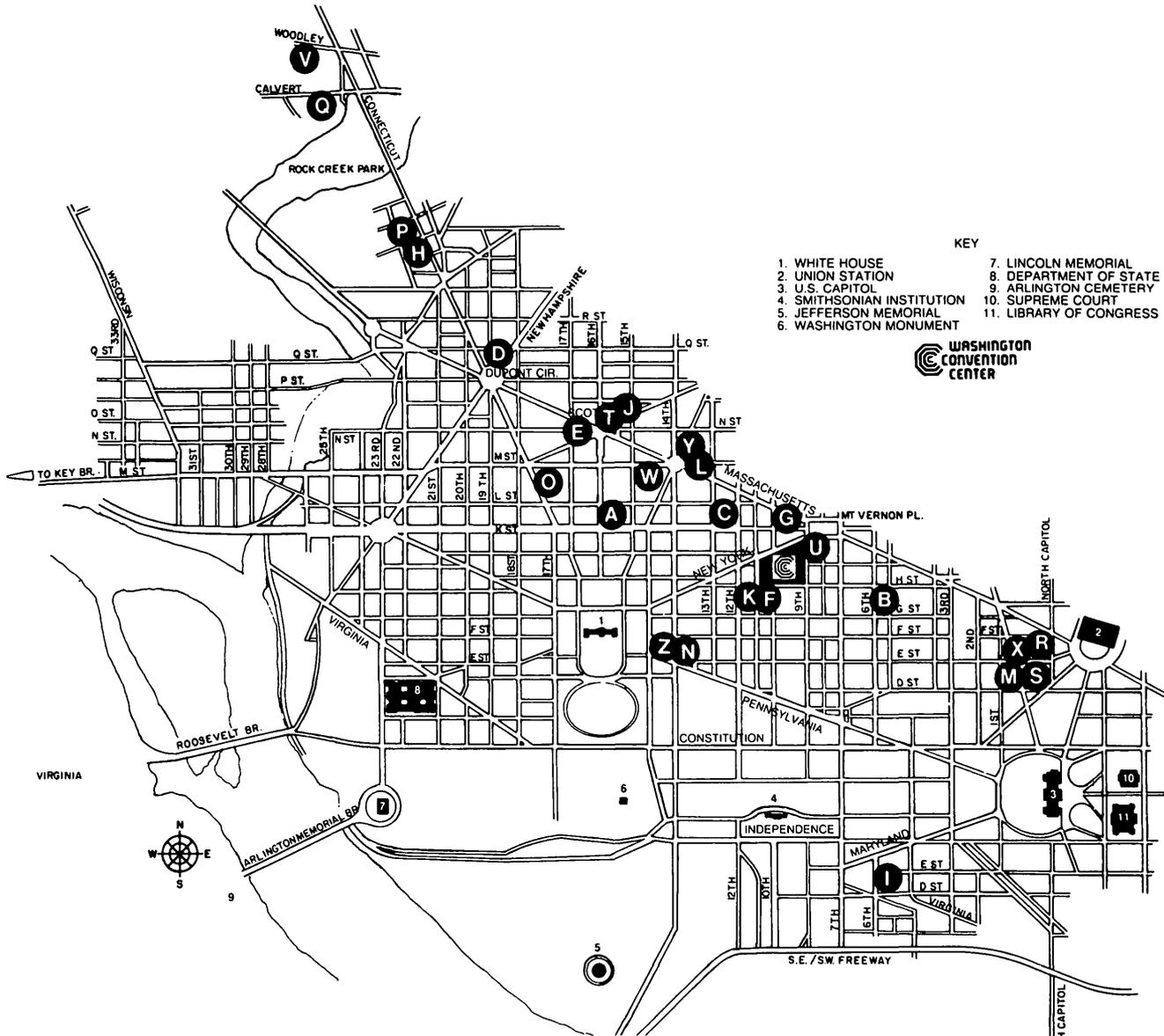
*All rates are per room per night

Room applications will not be processed without a deposit of US \$150 per room. The deposit may be made by check, money order, American Express, VISA, or MasterCard. **Make checks payable to the American Diabetes Association. All checks must be in US funds drawn on a US bank.** Deposits will be forwarded to the hotel to which you are assigned.

Failure to notify the IDF Congress Meeting Manager or the hotel of any change in arrival time or number of room occupants may result

in cancellation of your reservation and loss of your deposit.

Make all changes and cancellations in writing directly to the IDF Congress Meeting Manager before April 30, 1991; after that date make all changes and cancellations directly to the hotel to which you are assigned. International attendees may make changes and cancellations by phone (703) 549-1500, fax (703) 836-2464, or telex 901132.



**International Diabetes Federation
Housing Key, June 23-28, 1991.**

- | | |
|---------------------------------|---------------------------------------|
| A. Capital Hilton | P. Normandy Inn |
| B. Comfort Inn Downtown | Q. Omni Shoreham Hotel |
| C. Days Inn Downtown | R. Phoenix Park Hotel |
| D. Dupont Plaza Hotel | S. Quality Hotel Capitol Hill |
| E. Governor's House Holiday Inn | T. Radisson Park Terrace |
| F. Grand Hyatt Washington | U. Ramada Renaissance Techworld Hotel |
| G. Henley Park | V. Sheraton Washington |
| H. Highland Hotel | W. Vista International Hotel |
| I. Holiday Inn Capitol | X. Washington Court Hotel |
| J. Holiday Inn Central | Y. Washington Plaza Hotel |
| K. Holiday Inn Crowne Plaza | Z. Willard Intercontinental |
| L. Holiday Inn Thomas Circle | |
| M. Hyatt Regency Washington | |
| N. JW Marriott | |
| O. Mayflower Hotel | |

CONGRESS REGISTRATION FORM INFORMATION

Before completing the registration form enclosed, please read the following information which is designed to help you complete your registration. Please type or print your name in BLOCK letters in black ink.

1. Registration is open to all individuals interested in diabetes. There will be three program tracks with sessions for the physician, research scientist, clinician, health-care professional, and lay person.
2. Congress registration entitles you to:
 - a. attend all program sessions of the Congress;
 - b. submit an abstract to be considered for presentation at the Congress;
 - c. register for Satellite Symposia for additional fees;
 - d. attend the Opening Ceremony and other social events;
 - e. enter the Exhibit Hall;
 - f. receive Congress documents including the program, list of participants, and list of abstracts;
 - g. special bus transportation from the participating hotels to the Washington Convention Center.

Official Delegates to the IDF General Council from Member Countries will be exempt from this Registration Fee only if their Registration Form is accompanied by a letter from their National Association appointing them as Official Delegates to the IDF General Council. The Congress Organizing Committee will obtain certification from the IDF Executive Office to confirm the number of official delegates from each country. Otherwise, the Registration Fee must be paid.

3. Enrollment as an Accompanying Person (a person accompanying an enrolled delegate) entitles you to:
 - a. attend the Opening Ceremony and other social events,
 - b. enter the Exhibit Hall,
 - c. special bus transportation from the participating hotels to the Washington Convention Center.

Enrollment as an accompanying person does not entitle you to attend the program sessions of the Congress.

4. Payment of Fees:
 - a. Payment of fees must accompany all registration forms.
 - b. Delegates may pay by check, money order, bank draft, or credit card. **Checks and money orders must be made payable to the American Diabetes Association in US dollars drawn on a US bank.** Your name and full address should be typed or printed clearly on your check, money order, or bank draft. Acceptable credit cards include American Express, VISA, and MasterCard.

Registration Fees (US\$):

	Before January 31, 1991	After January 31, 1991
Nonmedical (Lay) Attendees	\$ 75	\$ 75
Scientific, Clinical, Health-Care Delivery Program		
Under 35 years of age:		
■ General Attendee	\$215	\$385
■ IDF Member Attendee*	\$205	\$375
Over 35 years of age:		
■ General Attendee	\$320	\$385
■ IDF Member Attendee*	\$310	\$375
Medical/Health-Care Students**	\$ 75	\$ 75
Accompanying Person	\$ 75	\$ 75

* IDF Member Attendees are those persons who are valid individual members of the International Diabetes Federation and who have paid their membership dues for 1990 by October 1, 1990.

** Registrants in this category must be currently enrolled in a program of study. Verification of status in the form of a letter from the student's institution must be included with the registration form in order for it to be processed.

- c. No other form of payment can be accepted.
- d. Your payment should cover:
 1. Registration fee: full payment.
 2. Fee for optional local tour(s): full payment.
 3. Accommodations: deposit only.
 4. Satellite symposia registration fee: full payment.
 5. Awards Banquet ticket(s): a fee of \$80 per person.
- e. Please retain the bottom copy of the Registration Form for your own records.

The Organizing Committee has a strong commitment to ensuring that the registration process and payment of fees for all individuals throughout the world accommodates the individual registrant. Individuals who have difficulty due to monetary or government restrictions submitting their registration fees in US currency, or need to submit one check to cover all costs (rather than a separate check for airfare), or are unable to forward the funds in advance of the meeting *must* contact the 14th IDF Congress Meeting Manager by December 1, 1990, to make other arrangements.

5. Confirmation:

Registration will be acknowledged in writing with confirmation of requests according to the submitted registration form. Bookings will be confirmed only after payment is received.
6. Refund Policy:
 - a. Cancellation notifications and applications for refunds must be submitted in writing to the IDF Congress Meeting Manager.
 - b. Cancellations received before April 30, 1991, will incur a cancellation fee as follows: Scientific and Clinical Program Attendee, \$50; Nonmedical (Lay)

Attendee, \$25; Medical/Health-Care Students, \$25; Accompanying Person, no fee.

- c. Cancellations received between April 30 and June 20, 1991, will receive a 50% refund of the registration fee.
- d. After June 20, 1991, applications for refunds will be considered only under exceptional circumstances.

7. Forward your Registration Form, by airmail if mailed internationally, together with your payment to:

14th IDF Congress Meeting Manager
American Diabetes Association
1660 Duke Street
Alexandria, VA 22314
USA

Contact for Hotels, Registration, and Meeting Logistics

14th IDF Congress Meeting Manager
American Diabetes Association
1660 Duke Street
Alexandria, VA 22314
USA

Telephone: (800) 232-3472
(703) 549-1500
ext. 349

Fax: (703) 836-2464
Telex: 901132

Contact for Congress Program

Harold Rifkin, MD
Chairman 14th IDF Congress Organizing
Committee
c/o American Diabetes Association
1660 Duke Street
Alexandria, VA 22314
USA

Telephone: (800) 232-3472
(703) 549-1500
ext. 281

Fax: (703) 836-7439
Telex: 901132

14th International Diabetes Federation Congress

June 23-28, 1991 Washington, D.C.

Section A: Personal Details

Please register only one person and two accompanying persons per form. This form can be copied for additional registrants.

Academic degree(s): MD DO PhD RN RD RPh Other _____ (please indicate)

First (Given) Name _____ Middle Initial _____ Last (Family) Name _____

Name (as you want name to appear on your badge) _____

Title _____

Professional Affiliation/Institution _____

Business Address _____

City _____ State _____ Postal Code _____

Country _____ Telephone with Area Code _____

Accompanying Person Name (as on badge) _____ Fax with Area Code _____

Accompanying Person Name (as on badge) _____ Telex _____

1. Specialty Area (check one):

- | | |
|---|---|
| <input type="checkbox"/> a. Adult Endocrinology | <input type="checkbox"/> i. Pediatrics |
| <input type="checkbox"/> b. Family Practice | <input type="checkbox"/> j. Pediatric Endocrinology |
| <input type="checkbox"/> c. Geriatrics | <input type="checkbox"/> k. Pharmacy |
| <input type="checkbox"/> d. Internal Medicine | <input type="checkbox"/> l. Podiatry |
| <input type="checkbox"/> e. Nursing | <input type="checkbox"/> m. Psychology |
| <input type="checkbox"/> f. Nutrition | <input type="checkbox"/> n. Public Health |
| <input type="checkbox"/> g. Ophthalmology | <input type="checkbox"/> o. Research |
| <input type="checkbox"/> h. Obstetrics/Gynecology | <input type="checkbox"/> p. Other _____ (please indicate) |

2. Type of Practice (check one):

- | | |
|--|---|
| <input type="checkbox"/> a. Clinic | <input type="checkbox"/> f. Research |
| <input type="checkbox"/> b. Corporate | <input type="checkbox"/> g. Student |
| <input type="checkbox"/> c. Hospital | <input type="checkbox"/> h. Academic |
| <input type="checkbox"/> d. Private Practice | <input type="checkbox"/> i. Other _____ (please indicate) |
| <input type="checkbox"/> e. Public Health | |

3. Public Interest (check one):

- | | |
|--|---|
| <input type="checkbox"/> a. Public Awareness | <input type="checkbox"/> d. Government Relations |
| <input type="checkbox"/> b. Fund Raising | <input type="checkbox"/> e. Youth Services |
| <input type="checkbox"/> c. Association Management | <input type="checkbox"/> f. Other _____ (please indicate) |

4. Personal Status:

- | | |
|--|--|
| <input type="checkbox"/> a. Volunteer | <input type="checkbox"/> d. Person with Diabetes in the Family |
| <input type="checkbox"/> b. Paid Staff | <input type="checkbox"/> e. No Diabetes |
| <input type="checkbox"/> c. Person with Diabetes | <input type="checkbox"/> f. Other _____ (please indicate) |

Section B: Registration Fees

	Before January 31, 1991	After January 31, 1991
Nonmedical (Lay) Attendees	US \$ 75	US \$ 75
Scientific, Clinical, Health-Care Delivery Programs		
Under 35 years of age:		
• General Attendee	US \$215	US \$385
• IDF Member Attendee*	US \$205	US \$375
Over 35 years of age:		
• General Attendee	US \$320	US \$385
• IDF Member Attendee*	US \$310	US \$375
Medical/Health-Care Students**	US \$ 75	US \$ 75
Accompanying Person	US \$ 75	US \$ 75

Total Payment Section B _____

*IDF Member Attendees are those persons who are valid individual members of the International Diabetes Federation and who have paid their membership dues for 1990 by October 1, 1990.

**Registrants in this category must be currently enrolled in a program of study. Verification of status in the form of a letter from the student's institution must be included with the registration form in order for it to be processed.

Section C: Awards Banquet

Tuesday, June 25, 1991

Banquet ticket(s), \$ 80 each; indicate number of each type of ticket being purchased:

_____ #Fish _____ #Beef

Total Payment Section C _____

Section D: Local Tours

Please indicate your choice of tour(s) and time preference.

Tour	Date/Time	No. Persons	Cost/Ea.	Payment
Monday, June 24				
Arlington Cemetery and National Cathedral	<input type="checkbox"/> 09:30-13:00 or	_____	\$21.00	_____
	<input type="checkbox"/> 13:00-16:00	_____		_____
The Capital City	<input type="checkbox"/> 09:30-12:30 or	_____	\$21.00	_____
	<input type="checkbox"/> 12:30-16:30	_____		_____
The Armed Forces Medical Museum	<input type="checkbox"/> 09:30-12:30 or	_____	\$21.00	_____
	<input type="checkbox"/> 12:30-16:30	_____		_____
Tuesday, June 25				
Capitol Building, Supreme Court and Library of Congress	<input type="checkbox"/> 09:30-12:30 or	_____	\$21.00	_____
	<input type="checkbox"/> 13:30-16:30	_____		_____
Georgetown Homes and Georgetown Park	<input type="checkbox"/> 09:30-12:30	_____	\$29.00	_____
Museums in Historic Homes	<input type="checkbox"/> 10:00-13:00	_____	\$25.00	_____
Wednesday, June 26				
Annapolis, Maryland	<input type="checkbox"/> 09:30-16:00	_____	\$49.00	_____
Three Nationals	<input type="checkbox"/> 10:00-13:30 or	_____	\$25.00	_____
	<input type="checkbox"/> 13:00-16:30	_____		_____
Champagne Tour	<input type="checkbox"/> 19:30-22:00	_____	\$33.00	_____
Thursday, June 27				
National Building and Union Station	<input type="checkbox"/> 09:30-12:30 or	_____	\$21.00	_____
	<input type="checkbox"/> 13:30-16:30	_____		_____
A Day in Old Virginia	<input type="checkbox"/> 09:30-15:30	_____	\$46.00	_____
Embassy Row	<input type="checkbox"/> 13:30-16:30	_____	\$23.00	_____
Friday, June 28				
Shopping Safari	<input type="checkbox"/> 9:00-14:30	_____	\$31.00	_____
Women of Washington Panel	<input type="checkbox"/> 09:30-11:30	_____	\$21.00	_____
Tea at the Congressional Club	<input type="checkbox"/> 15:30-17:00	_____	\$46.00	_____

Total Payment Section D _____

Section F: Pre- and Post-Congress Tours

Please indicate by checking the box(es) if you would like to receive more information regarding any of the pre- and post-Congress tours offered by American Express Travel Services.

- | | |
|--|--|
| <input type="checkbox"/> Montreal, Canada | <input type="checkbox"/> Los Angeles, California |
| <input type="checkbox"/> Chicago, Illinois | <input type="checkbox"/> Cancun, Mexico |
| <input type="checkbox"/> Boston, Massachusetts | <input type="checkbox"/> San Juan, Puerto Rico |
| <input type="checkbox"/> Williamsburg, Virginia | <input type="checkbox"/> Four nights including Scottsdale, Grand Canyon, and Las Vegas |
| <input type="checkbox"/> Nashville, Tennessee | <input type="checkbox"/> Six nights including New York City, Boston, Niagara Falls, Detroit, and Chicago |
| <input type="checkbox"/> New Orleans, Louisiana | |
| <input type="checkbox"/> Orlando, Florida | |
| <input type="checkbox"/> San Francisco, California | |

Please note the following deadlines:

Abstract Submissions
September 21, 1990

Travel Grant Applications
September 28, 1990

Pre-registration
January 31, 1991

Section E: Accommodations

You have two options for reserving accommodations:

If you would like the IDF Congress Meeting Manager to make your assignment based on lowest cost, check here or nearest to Washington Convention Center, check here . If you would like to be housed with a special group, please specify: _____

If you would like to indicate your hotel choice, please make accommodations reservation by numbering your first three choices in order of preference on the following list (prices quoted are per room per night in US\$). If shared accommodations are required, see conditions printed in brochure.

Hotels	Single	Double	
A. Capital Hilton	\$145	\$165	_____
B. Comfort Inn Downtown	\$ 84	\$ 97	_____
C. Days Inn Downtown	\$ 73	\$ 75	_____
D. Dupont Plaza Hotel	\$120	\$140	_____
E. Governor's House Holiday Inn	\$110	\$115	_____
F. Grand Hyatt Washington (IDF Headquarters Hotel)	\$165	\$190	_____
G. Henley Park Hotel	\$145	\$165	_____
H. Highland Hotel	\$115	\$130	_____
I. Holiday Inn Capitol Hill	\$105	\$125	_____
J. Holiday Inn Central	\$103	\$115	_____
K. Holiday Inn Crowne Plaza			
Regular	\$135	\$155	_____
Deluxe	\$150	\$170	_____
Concierge	\$165	\$185	_____
L. Holiday Inn Thomas Circle	\$ 87	\$ 97	_____
M. Hyatt Regency Washington	\$159	\$179	_____
N. JW Marriott (Co-Headquarters)	\$157	\$167	_____
O. Mayflower Hotel			
Regular	\$105	\$105	_____
Deluxe	\$150	\$150	_____
P. Normandy Inn	\$ 70	\$ 80	_____
Q. Omni Shoreham Hotel	\$150	\$170	_____
R. Phoenix Park Hotel	\$125	\$135	_____
S. Quality Hotel Capitol Hill	\$ 92	\$107	_____
T. Radisson Park Terrace	\$135	\$155	_____
U. Ramada Renaissance Techworld (Co-Headquarters)			
Regular	\$140	\$160	_____
Renaissance Club	\$160	\$180	_____
V. Sheraton Washington			
Regular	\$136	\$160	_____
Deluxe	\$148	\$173	_____
Park Tower	\$156	\$181	_____
Wardman Tower	\$177	\$202	_____
W. Vista International Hotel			
Regular	\$153	\$173	_____
Executive	\$178	\$198	_____
X. Washington Court Hotel	\$160	\$175	_____
Y. Washington Plaza Hotel	\$ 98	\$108	_____
Z. Willard Intercontinental	\$190	\$220	_____

Arrival date: _____ Departure date: _____

Room reservations will not be processed without a deposit of US\$150 per room. The deposit may be made by check, money order, American Express, VISA, or MasterCard. Make checks payable to the American Diabetes Association. Deposits will be forwarded to the hotel to which you are assigned.

Failure to notify the IDF Congress Meeting Manager or the hotel of any change in arrival time or number of room occupants may result in cancellation of your reservation and loss of your deposit.

All changes and cancellations must be made in writing directly to the IDF Congress Meeting Manager before April 30, 1991. After that date, all changes and cancellations must be made directly to the hotel to which you are assigned. International attendees may make changes and cancellations by phone (703) 549-1500, fax (703) 836-2464, or telex 091132.

Total Payment Section E _____

Section G: IDF Satellite Symposia

Please check box(es) for symposium you will be attending. Additional information will be sent by the symposium organizer.

- New Developments in the Etiology and Treatment of Childhood Diabetes*
Dates: June 19-22, 1991 Location: Williamsburg, Virginia
Fee: \$599 (includes meals and hotel based on double occupancy)
- International Diabetes Youth and Camping Program*
Dates: June 19-22, 1991 Location: Charlton, Massachusetts
(transportation provided from Boston's Logan Airport)
Fee: \$200 for professionals
\$125 for students
\$175 per person for two people from the same camp
\$125 per person for three people from the same camp
- Special Committee for Diabetes Magazines, 6th International Symposium*
Dates: June 19-21, 1991 Location: Washington, DC
Fee: None. Attendance is open ONLY to representatives of magazines published by member organizations of the IDF.
- Diabetes: Effects on Pregnancy and the Neonate*
Dates: June 20-22, 1991 Location: Newport, Rhode Island
Fee: \$250. After March 1, 1991 - \$270
Accompany person - \$175
(includes a New England clam bake at Hammersmith Farm and a banquet at a Newport mansion)
- Macrovascular Complications of Diabetes Mellitus*
Dates: June 20-22, 1991 Location: Charleston, South Carolina
Fee: \$150 registration only
- Symposium on National Diabetes Control Programs*
Dates: June 20-22, 1991 Location: Baltimore, Maryland
Fee: \$200 registration only
- Diabetic Foot Problems*
Dates: June 20-22, 1991 Location: Washington, DC
Fee: \$175 registration only
- Behavioral Aspects of Diabetes Mellitus*
Dates: June 20-22, 1991 Location: Williamsburg, Virginia
Fee: \$150 registration only
- Nutrition and Diabetes Mellitus: Focus for the 1990's*
Dates: June 22-23, 1991 Location: Baltimore, Maryland
Fee: \$95 registration only
- Controversies in Etiology and Treatment of Diabetic Neuropathy*
Dates: June 29-July 2, 1991 Location: New York, New York
Fee: \$500 (includes 3 nights lodging and all meals)
- The Central Nervous System and Diabetes Mellitus*
Dates: June 29-July 1, 1991 Location: Near Washington, DC
Fee: Invited speakers and participants. Partial sponsorship maybe available for young investigators and others interested.
- Pancreatic Beta-Cell 1991: Gene to Disease*
Dates: June 29-July 1, 1991 Location: Cambridge, Massachusetts
Fee: \$275 (includes 3 lunches, 1 dinner/special event, coffee breaks)
\$150 for postdoctoral fellows
- Health-Care Delivery in the Prevention, Diagnosis, and Treatment of Diabetes Complications (Complications Diabetiques: Prevention, Diagnostic et Treatment)*
Dates: June 29, 1991, Morning Location: Washington, DC
Fee: None
- Diabetes in the Tropics and Developing Countries*
Dates: June 29, 1991 Location: Washington, DC
Fee: \$40 registration only
- Epidemiology of Diabetes and Its Complications*
Dates: June 30-July 2, 1991 Location: Williamsburg, Virginia
Fee: \$125 registration only
- Protein Metabolism in Diabetes*
Dates: June 30-July 1, 1991 Location: Burlington, Vermont
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- Effective Patient Teaching*
Dates: July 1-3, 1991 Location: Nashville, Tennessee
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- International Symposium on Diabetes Education*
Dates: July 1-3, 1991 Location: Costa Rica, Central America
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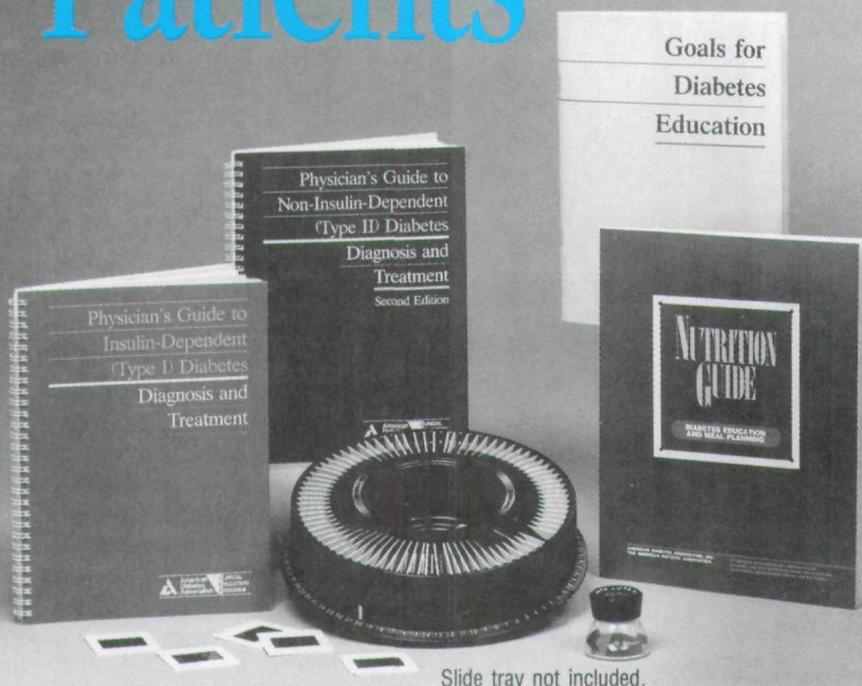
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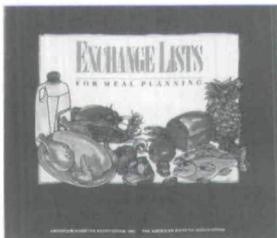
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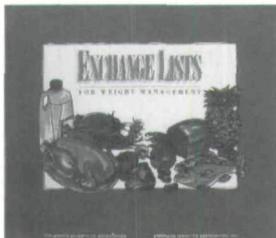
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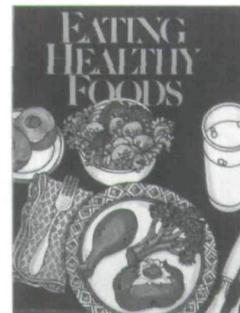
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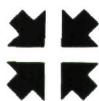
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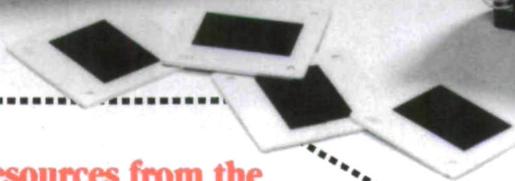
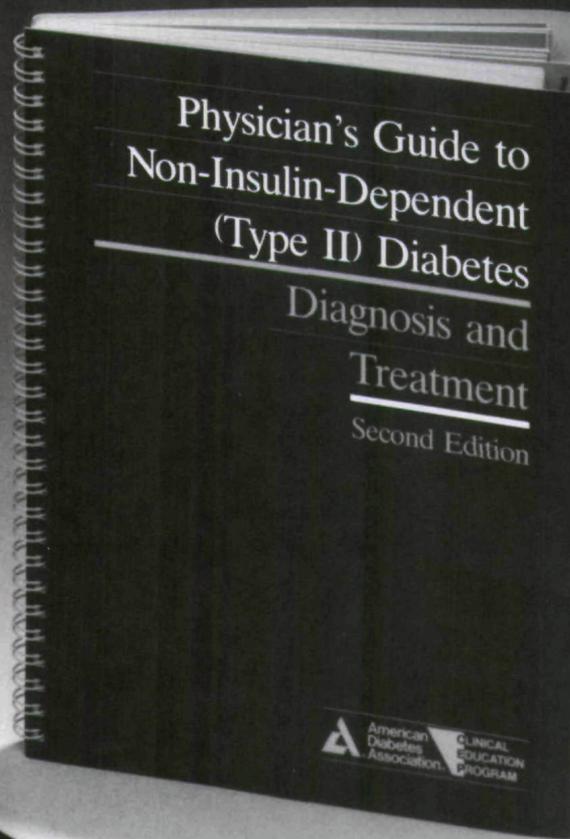
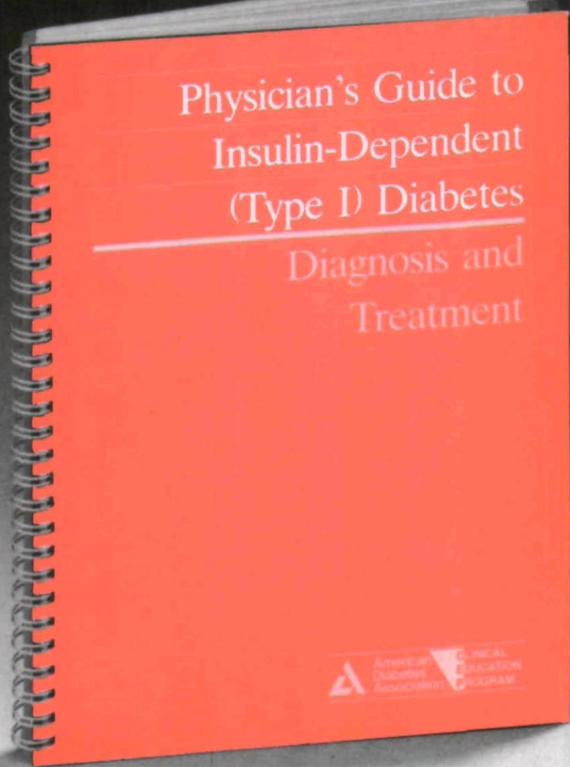
¹ FDA survey, "Patient Receipt of Rx Drug Information", 1983

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Diabetologia

Clinical and Experimental Diabetes and Metabolism

Organ of the European Association for the Study of Diabetes (EASD)

Volume 33 Number 9 September 1990

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Neutropenia/Agranulocytosis—Neutropenia (<1000/mm³) with myeloid hypoplasia has resulted from use of captopril. About half of the neutropenic patients developed systemic or oral cavity infections or other features of the syndrome of agranulocytosis. The risk of neutropenia is dependent on the clinical status of the patient:

In clinical trials in patients with hypertension who have normal renal function (serum creatinine less than 1.6 mg/dL and no collagen vascular disease), neutropenia has been seen in one patient out of over 8,600 exposed. In patients with some degree of renal failure (serum creatinine at least 1.6 mg/dL) but no collagen vascular disease, the risk in clinical trials was about 1 per 500. Doses were relatively high in these patients, particularly in view of their diminished renal function. In patients with collagen vascular diseases (e.g., systemic lupus erythematosus, scleroderma) and impaired renal function, neutropenia occurred in 3.7% of patients in clinical trials. While none of the over 750 patients in formal clinical trials of heart failure developed neutropenia, it has occurred during the subsequent clinical experience. Of reported cases, about half had serum creatinine \geq 1.6 mg/dL and more than 75% received procainamide. In heart failure, it appears that the same risk factors for neutropenia are present.

Neutropenia has appeared usually within 3 months after starting therapy, associated with myeloid hypoplasia and frequently accompanied by erythroid hypoplasia and decreased numbers of megakaryocytes (e.g., hypoplastic bone marrow and pancytopenia); anemia and thrombocytopenia were sometimes seen. Neutrophils generally returned to normal in about 2 weeks after captopril was discontinued, and serious infections were limited to clinically complex patients. About 13% of the cases of neutropenia have ended fatally, but almost all fatalities were in patients with serious illness, having collagen vascular disease, renal failure, heart failure or immunosuppressant therapy, or a combination of these complicating factors. **Evaluation of the hypertensive or heart failure patient should always include assessment of renal function.** If captopril is used in patients with impaired renal function, white blood cell and differential counts should be evaluated prior to starting treatment and at approximately 2-week intervals for about 3 months, then periodically. In patients with collagen vascular disease or who are exposed to other drugs known to affect the white cells or immune response, particularly when there is impaired renal function, captopril should be used only after an assessment of benefit and risk, and then with caution. All patients treated with captopril should be told to report any signs of infection (e.g., sore throat, fever). If infection is suspected, perform white cell counts without delay. Since discontinuation of captopril and other drugs has generally led to prompt return of the white count to normal, upon confirmation of neutropenia (neutrophil count <1000/mm³) withdraw captopril and closely follow the patient's course.

Proteinuria: Total urinary proteins >1 g per day were seen in about 0.7% of patients on captopril. About 90% of affected patients had evidence of prior renal disease or received high doses (>150 mg/day), or both. The nephrotic syndrome occurred in about one-fifth of proteinuric patients. In most cases, proteinuria subsided or cleared within 6 months whether or not captopril was continued. The BUN and creatinine were seldom altered in proteinuric patients. Since most cases of proteinuria occurred by the 8th month of therapy with captopril, patients with prior renal disease or those receiving captopril at doses >150 mg per day, should have urinary protein estimates (dip-stick on 1st morning urine) before therapy, and periodically thereafter.

Hypotension: Excessive hypotension was rarely seen in hypertensive patients but is a possibility in severely salt/volume-depleted persons such as those treated vigorously with diuretics (see PRECAUTIONS [Drug Interactions]). In heart failure, where the blood pressure was either normal or low, transient decreases in mean blood pressure \geq 20% were recorded in about half of the patients. This transient hypotension may occur after any of the first several doses and is usually well tolerated, although rarely it has been associated with arrhythmia or conduction defects. A starting dose of 6.25 or 12.5 mg tid may minimize the hypotensive effect. Patients should be followed closely for the first 2 weeks of treatment and whenever the dose of captopril and/or diuretic is increased.

BECAUSE OF THE POTENTIAL FALL IN BLOOD PRESSURE IN THESE PATIENTS, THERAPY SHOULD BE STARTED UNDER VERY CLOSE MEDICAL SUPERVISION.

PRECAUTIONS: General: Impaired Renal Function—Hypertension—Some hypertensive patients with renal disease, particularly those with severe renal artery stenosis, have developed increases in BUN and serum creatinine. It may be necessary to reduce captopril dosage and/or discontinue diuretic. For some of these patients, normalization of blood pressure and maintenance of adequate renal perfusion may not be possible. **Heart Failure**—About 20% of patients develop stable elevations of BUN and serum creatinine >20% above normal or baseline upon long-term treatment. Less than 5% of patients, generally with severe preexisting renal disease, required discontinuation due to progressively increasing creatinine. See DOSAGE AND ADMINISTRATION, ADVERSE REACTIONS [Altered Laboratory Findings]. **Valvular Stenosis**—A theoretical concern, for risk of decreased coronary perfusion, has been noted regarding vasodilator treatment in patients with aortic stenosis due to decreased afterload reduction. **Surgery/Anesthesia**—If hypotension occurs during surgery or anesthesia, and is considered due to the effects of captopril, it is correctable by volume expansion.

Drug Interactions: Hypotension—Patients on Diuretic Therapy—Precipitous reduction of blood pressure may occasionally occur within the 1st hour after administration of the initial captopril dose in patients on diuretics, especially those recently placed on diuretics, and those on severe dietary salt restriction or dialysis. This possibility can be minimized by either discontinuing the diuretic or increasing the salt intake about 1 week prior to initiation of captopril therapy or by initiating therapy with small doses (6.25 or 12.5 mg). Alternatively, provide medical supervision for at least 1 hour after the initial dose.

Agents Having Vasodilator Activity—In heart failure patients, vasodilators should be administered with caution.

Agents Causing Renin Release—Captopril's effect will be augmented by antihypertensive agents that cause renin release.

Agents Affecting Sympathetic Activity—The sympathetic nervous system may be especially important in supporting blood pressure in patients receiving captopril alone or with diuretics. Beta-adrenergic blocking drugs add some further antihypertensive effect to captopril, but the overall response is less than additive. Therefore, use agents affecting sympathetic activity (e.g., ganglionic blocking agents or adrenergic neuron blocking agents) with caution.

Agents Increasing Serum Potassium—Give potassium-sparing diuretics or potassium supplements only for documented hypokalemia, and then with caution, since they may lead to a significant increase of serum potassium. Use potassium-containing salt substitutes with caution.

Inhibitors of Endogenous Prostaglandin Synthesis—Indomethacin and other nonsteroidal anti-inflammatory agents may reduce the antihypertensive effect of captopril, especially in low renin hypertension.

Lithium—Increased serum lithium levels and symptoms of lithium toxicity have been reported in patients receiving concomitant lithium and ACE inhibitor therapy. These drugs should be coadministered with caution and frequent monitoring of serum lithium levels is recommended. If a diuretic is also used, it may increase the risk of lithium toxicity.

Drug/Laboratory Test Interaction: Captopril may cause a false-positive urine test for acetone.

Carcinogenesis, Mutagenesis and Impairment of Fertility: Two-year studies with doses of 50 to 1350 mg/kg/day in mice and rats failed to show any evidence of carcinogenic potential. Studies in rats have revealed no impairment of fertility.

Pregnancy: Category C: Embryocidal effects and craniofacial malformations were observed in rabbits. **Human Experience**—There are no adequate and well-controlled studies of captopril in pregnant women. Data are available that show captopril crosses the human placenta. Captopril should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Based on post-marketing experience with all ACE inhibitors, the following information has been collected. Inadvertent exposure limited to the first trimester of pregnancy does not appear to affect fetal outcome adversely. Fetal exposure during the second and third trimester of pregnancy has been associated with fetal and neonatal morbidity and mortality.

When ACE inhibitors are used during the later stages of pregnancy, there have been reports of hypotension and decreased renal perfusion in the newborn. Oligohydramnios in the mother has also been reported. Infants exposed *in utero* to ACE inhibitors should be closely observed for hypotension, oliguria and hyperkalemia. If oliguria occurs, attention should be directed toward support of blood pressure and renal perfusion with the administration of fluids and pressors as appropriate. Problems associated with prematurity such as patent ductus arteriosus have occurred in association with maternal use of ACE inhibitors but it is not clear whether they are related to ACE inhibition, maternal hypertension or the underlying prematurity.

There is no experience with exchange transfusion, hemodialysis or peritoneal dialysis for removing captopril from the neonatal circulation.

Nursing Mothers: Captopril is secreted in human milk. Exercise caution when administering captopril to a nursing woman, and, in general, nursing should be interrupted.

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

ADVERSE REACTIONS: Reported incidences are based on clinical trials involving approximately 7000 patients.

Renal—About 1 of 100 patients developed proteinuria (see WARNINGS). Renal insufficiency, renal failure, polyuria, oliguria, and urinary frequency in 1 to 2 of 1000 patients.

Hematologic—Neutropenia/agranulocytosis has occurred (see WARNINGS). Anemia, thrombocytopenia, and pancytopenia have been reported.

Dermatologic—Rash, (usually maculopapular, rarely urticarial), often with pruritus, and sometimes with fever and eosinophilia, in about 4 to 7 of 100 patients (depending on renal status and dose), usually during the 1st 4 weeks of therapy. Pruritus, without rash, in about 2 of 100 patients. A reversible associated pemphigoid-like lesion, and photosensitivity, have also been reported. Flushing or pallor in 2 to 5 of 1000 patients.

Cardiovascular—Hypotension may occur; see WARNINGS and PRECAUTIONS [Drug Interactions] for discussion of hypotension on initiation of captopril therapy. Tachycardia, chest pain, and palpitations each in about 1 of 100 patients. Angina pectoris, myocardial infarction, Raynaud's syndrome, and congestive heart failure each in 2 to 3 of 1000 patients.

Dysgeusia—Approximately 2 to 4 (depending on renal status and dose) of 100 patients developed a diminution or loss of taste perception; taste impairment is reversible and usually self-limited even with continued drug use (2 to 3 months).

Angioedema—Angioedema involving the extremities, face, lips, mucous membranes, tongue, glottis or larynx has been reported in approximately one in 1000 patients. Angioedema involving the upper airways has caused fatal airway obstruction. (See WARNINGS.)

The following have been reported in about 0.5 to 2 percent of patients but did not appear at increased frequency compared to placebo or other treatments used in controlled trials: gastric irritation, abdominal pain, nausea, vomiting, diarrhea, anorexia, constipation, aphthous ulcers, peptic ulcer, dizziness, headache, malaise, fatigue, insomnia, dry mouth, dyspnea, cough, alopecia, paresthesias.

Other clinical adverse effects reported since the drug was marketed are listed below by body system. In this setting, an incidence or causal relationship cannot be accurately determined.

General: Asthenia, gynecomastia.

Cardiovascular: Cardiac arrest, cerebrovascular accident, syncope.

Dermatologic: Bullous pemphigus.

Gastrointestinal: Pancreatitis, glossitis.

Hematologic: Anemia, including aplastic and hemolytic.

Hepatobiliary: Hepatitis, including rare cases of necrosis, cholestasis.

Metabolic: Symptomatic hyponatremia.

Musculoskeletal: Myalgia, myasthenia.

Nervous/Psychiatric: Ataxia, confusion, depression, nervousness, somnolence.

Respiratory: Bronchospasm, eosinophilic pneumonitis, rhinitis.

Special Senses: Blurred vision.

Urogenital: Impotence.

As with other ACE inhibitors, a syndrome has been reported which includes: fever, myalgia, arthralgia, rash or other dermatologic manifestations, eosinophilia and an elevated ESR. Findings have usually resolved with discontinuation of treatment.

Altered Laboratory Findings: Serum Electrolytes: Hyperkalemia: small increases in serum potassium, especially in patients with renal impairment (see PRECAUTIONS).

Hyponatremia: particularly in patients receiving a low sodium diet or concomitant diuretics.

BUN/Serum Creatinine: Transient elevations of BUN or serum creatinine especially in volume or salt depleted patients or those with renovascular hypertension may occur. Rapid reduction of longstanding or markedly elevated blood pressure can result in decreases in the glomerular filtration rate and, in turn, lead to increases in BUN or serum creatinine.

Hematologic: A positive ANA has been reported.

Liver Function Tests: Elevations of liver transaminases, alkaline phosphatase, and serum bilirubin have occurred.

OVERDOSAGE: Primary concern is correction of hypotension. Volume expansion with an I.V. infusion of normal saline is the treatment of choice for restoration of blood pressure. Captopril may be removed from the general circulation by hemodialysis.

DOSAGE AND ADMINISTRATION: CAPOTEN (captopril) should be taken one hour before meals. In hypertension, CAPOTEN may be dosed bid or tid. Dosage must be individualized; see DOSAGE AND ADMINISTRATION section of package insert for detailed information regarding dosage in hypertension and in heart failure. Because CAPOTEN (captopril) is excreted primarily by the kidneys, dosage adjustments are recommended for patients with impaired renal function. **Consult package insert before prescribing CAPOTEN (captopril).**

HOW SUPPLIED: Available in tablets of 12.5, 25, and 50 mg in bottles of 100 and 1000; 100 mg in bottles of 100; and in UNIMATIC® unit-dose packs of 100 tablets. (J3-658R)

A BALANCE OF BENEFITS...



**FOR THE
HYPERTENSIVE DIABETIC
PATIENT***

- Controls blood pressure, regardless of race or age studied^{1,2}
- Not associated with impairment of glucose tolerance³
- Does not adversely affect lipid profile^{2,4}
- Reduces total peripheral resistance⁵
- Rarely associated with sexual dysfunction^{1,4}

CAPOTEN[®]
(captopril tablets)

Cares for the heart and more

*CAPOTEN may be used as initial therapy in hypertension only for patients with normal renal function in whom the risk of neutropenia/agranulocytosis is relatively low (1 out of over 8,600 in clinical trials). Use special precautions in patients with impaired renal function, collagen vascular disorders, or those exposed to other

drugs known to affect the white blood cells or immune response. Evaluation of hypertensives should always include assessment of renal function. See INDICATIONS AND USAGE, CONTRAINDICATIONS, WARNINGS, PRECAUTIONS, and ADVERSE REACTIONS in the brief summary of prescribing information on the adjacent page.