



# RSSDI NEWS

1998 • 5 • July

## 26th Annual Scientific Meeting of the Research Society for the Study of Diabetes in India on December 18, 19 and 20 at Ahmedabad

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Dr. P.V. RAO  
Professor of Endocrinology  
Nizam's Institute of Medical Sciences  
Hyderabad 500 082 AP

**rssdi 98** is an intensive scientific program for two and half days, and to fulfill the expectations of all our members two concurrent sessions in the afternoons - one devoted to Clinical Diabetology and other to Clinical Research are planned.

During the **rssdi 98**, two workshops are also planned -

1. Computerization of Clinical Records,
2. Lipid methodologies.

Only 20 participants will be registered for each work shop at an additional registration fee. Usual orations and Meet the Professor Sessions are also included.

There will be two sessions on the RSSDI themes of the year,

1. Quality of Diabetes Care and its evaluation,
2. Does Fast Food kill fast.

All free communications will be given time for oral presentation or poster presentation. If allotted for poster presentation, there will be clear time marked for all participants to go through posters and discuss with the authors. There is provision of ample time for audience participation at every session. The abstracts of free communications will be published in the International Journal of Diabetes in Developing Countries.

Suggestions are invited from all members of RSSDI regarding any basic change they desire in the program envisaged thus far. Please write to us about the topic you wish to be covered and your choice of speakers. We will try to incorporate all your suggestions if feasible within framework of time and prioritization. Please write before July 31, 1998 to Prof. H.B. Chandalia.

**Submit abstracts before September 30 to**

Prof. H.B. Chandalia, Chairman, Scientific Committee  
18 Kala Bhavan, 3 Mathew Road, Mumbai 400 004  
tel 022 363 3695, 363 4320, 287 1613 fax 022 493 8322

Registration is Rs.1000, Rs. 750 for life members and Rs.500 for accompanying persons by draft favoring RSSDI 98 to be sent before September 30 to the Organizing Secretary, Dr. Mayur R. Patel, Yash Diabetes Clinic, 304 Supath, Nr Vijay Char Rasta, Navrangpura, Ahmedabad 380 009, Gujarat,  
tel 079 755 7888, 46 0607, 40 1030 fax 589 3235  
e-mail : mayur-patel-98@yahoo.com

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## ELECTIONS FOR RSSDI EXECUTIVE COMMITTEE, 1999

Following the Silver Jubilee Annual General Body Meeting held at Chennai and as per the amended Constitution of the RSSDI, it is decided to elect the President, two Vice Presidents, Honorary Secretary, Honorary Joint Secretary, Honorary Treasurer and six Executive Committee Members for installing in the next Annual General Body Meeting at Ahmedabad in 1998.

To get elected to the EC, a candidate shall be a member of the RSSDI for at least five years. Nominations from eligible life members who joined RSSDI before July 1993 with membership numbers upto 172 are invited. Please send your nomination in the format as in the next column duly proposed and seconded by RSSDI life members to the Secretariat to reach before July 31.

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## QUALITY OF DIABETES CARE AND ITS EVALUATION

This topic is selected as the main theme of our Annual Scientific Meeting to be held in Ahmedabad this year. This will give us an opportunity to

1. Assess the quality of diabetes care being provided at different levels (primary care physician, tertiary care centre, private clinics, medical colleges etc.).

Some of the questions we need to address are :

- a. What is the quality of care being provided at different levels of health care?
  - b. If inadequate, what remedial measures should we consider?
  - c. What is the cost of diabetes care? What other inputs are required? Can we prioritise amongst different aspects of diabetes care which are more important than others?
  - d. Whom should we entrust different aspects of diabetes care?
2. Define and elaborate upon the methods we should use to evaluate the quality of diabetes care.

Some of the questions we need to address are :

- a. What is good diabetes care? What are its components?
- b. What is the relative importance of each component? Can we design a screening system to quantitate the quality of diabetes care?

## DOES FAST FOOD KILL FAST?

Fast Food : It is difficult to define fast food by convention, it is the food that can be prepared and served rapidly to suit modern fast pace of life.

The typical examples of American fast foods are : French fries, Hamburger, Pizza, Ice-cream, Hot Dog etc. The few typical Indian fast foods are : Pav Bhaji, Bhel Puri, Idli, Dosai, Pakoras etc. The fast foods may be nutritious but are likely to suffer from following drawbacks :

1. They are usually calorie packed or calorically dense.
2. They usually are high in carbohydrate and fat but somewhat low in protein.
3. They usually have poor contents of vegetable or fruits and hence are deficient in micronutrients which are present in vegetables and fruits. They may have poor content of antioxidants, vitamins, fiber and other micronutrients.

## FORMAT FOR NOMINATION PAPER FOR ALL ELECTIONS

### Office for which the Candidate is nominated

Name of the Candidate  
Address of the Candidate  
Membership No.  
Telephone numbers

Name of the Proposer  
Address of the Proposer  
Membership No.  
Date

Signature of the Proposer

Name of the Seconder  
Address of the Seconder  
Membership No.  
Date

Signature of the Seconder

### Consent of the Candidate

I agree to serve on the Executive Committee of the RSSDI in the capacity of the nomination mentioned above, if elected.

Signature

## Course on Advances in Diabetology

by Indian College of Physicians, Association of Physicians of India at Basaveshwar Teaching Hospital, Gulbarga on July 26, 1998

*approved for 5 RSSDI credit hours*  
register by sending draft for Rs.150 favoring **CME, Diabetes** to

Prof. S. Muralidhar Rao  
Basaveshwar Teaching Hospital  
University Road, Gulbarga 585 105  
tel 08472 23955 20870 20574

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## South Zone Diabetes Update 98

at Bangalore on August 7, 8 and 9  
*approved for 10 RSSDI credit hours*

Register by sending draft for Rs.300 favoring

### Organising Secretary - SZDU 98 to

Dr. S.R. Aravind  
359-360 19th Main  
1st Block Rajajinagar  
Bangalore 560 010 KA  
tel 080 3325824 3323560 3329909  
fax 6606765  
e-mail bhavana@blr.vsnl.net.in

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## Diabetes and Cardiovascular Complications

at Agartala, Tripura  
on September 11 and 12, 1998  
*approved for 10 RSSDI credit hours*

register by sending draft for Rs.200 favoring

**All Tripura Diabetic Forum** to  
Dr. P.K. Bhattacharya  
Sarat Sarani, Durga Chowmuhani  
Agartala 799 001 TR  
tel 0381 225444 224555 228159  
fax 225001 223201

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## CME in DIABETES

at Khajuraho  
on October 3 and 4, 1998  
by **Prof. B.N. Srivastava**  
*approved for 10 RSSDI credit hours*

Registration enquiries to

Dr. Parimal Swamy  
601/6 West Nillar Ganj  
Jabalpur 482 002 MP  
tel 0761 314832 25374 23688  
fax 424973



## THE INTEGRAL MANAGEMENT OF DIABETES MELLITUS PATIENTS

### Pharmacological Management

**Metformin** is a biguanide OHA acting on carbohydrate and lipid metabolism. It increases peripheral glucose uptake, decreases glucose production in the liver, and reduces insulin need in type 2 diabetes. It may cause small decrements in plasma triglycerides and LDL cholesterol levels. Gastrointestinal side effects are common. Lactic acidosis, a serious condition, may occur in presence of renal or hepatic insufficiency. Metformin is not used in pregnancy, with alcohol, in presence of renal or hepatic insufficiency, or metabolic acidosis, or ketoacidosis.

**Acarbose** is an alpha-glucosidase inhibitor. It delays digestion of carbohydrates, and decreases post-prandial hyperglycemia and insulin secretion.

**Combination therapy** may be needed by some persons because of secondary failure to OHA monotherapy after many years of use. Likewise, under stress situations, due to illness or infection, or severe emotional calamity, a patient may fail to maintain metabolic control with an OHA. Primarily, the appearance of marked hyperglycemia in a previously well controlled patient, calls for a treatment review. Thus, one may alter the dosage, or add another oral drug, or add insulin. In secondary failure to sulfonylureas, a daily added evening dose of insulin consistently achieves glycemic control, and is just as useful as a complex multiple-injection plan. Combining metformin with a sulfonylurea lowers day-long plasma glucose and free fatty acid concentrations. It may be an efficacious alternative to added insulin in some persons, particularly in those who need to lose weight, and for persons with hyperlipidemia.

**Insulin** injection is an essential exogenous source of insulin for persons with type 1 diabetes. Many type 2 diabetics on oral drugs may need additional insulin later in life, due to a secondary drug failure, or associated illness. Bovine insulin, obtained from cattle pancreas, differs from human insulin in three amino acids. As a result, it is more antigenic than porcine insulin obtained from the pancreas of pigs. Porcine insulin deviates from

human insulin in one amino acid. Semi-synthetic human insulin is manufactured by enzymatically replacing the amino acid alanine in the porcine insulin molecule by threonine. The biosynthetic method employs the genetic recombinant DNA technique using *Escherichia coli*, and does not depend on animal organs

There are four types of insulin formulations, based on duration of action. Thus, we have short acting, intermediate acting, long acting, and biphasic insulin. Biphasic insulin contains a mixture of short and intermediate acting (NPH) insulin. Often, the initial dose is 0.5 units/kg body weight for type 1 patients, and 0.2 units/kg body weight in type 2 cases with oral medication. Even so, insulin dosage must be individually determined. Insulin is given 30 to 45 minutes before food, and sometimes before stressful activities. Diurnal blood glucose record for each individual helps in selecting the type of insulin and the dosage. Newer patient friendly injection devices are now available.

### Follow-up Schedule

Blood glucose test (self-monitored)	Before meals and bed time
Medical check-up, growth, diet and drug review	Every 3 to 4 months
HbA <sub>1C</sub> test	Every 3 months
Eye check for retinopathy	Annual after 5 years of diabetes
Urine test for microalbuminuria	Annual after 5 years of diabetes
Lipid profile	Annual

### Self-monitoring

The easiest check someone can do at home is a urine test. However, urine testing is not an accurate reflection of blood glucose. Certain drugs and vitamin C interfere with urine test results. It is more accurate to measure blood glucose directly. The clinic or a laboratory can

measure blood glucose according to the specified follow-up schedule. However, blood glucose levels change from hour to hour, and diabetics need to take control by constantly monitoring their blood-sugar level and playing an active role in managing their diabetes. As a learning, diabetics could measure their blood glucose just before, and two hours after their favourite *forbidden* food. The response is both startling and instructive to the patient. Self-monitoring of blood glucose records the body's response to meals, exercise, stress, and medication. Children and adolescents may also learn self-monitoring of blood glucose.

### Clinic Monitoring

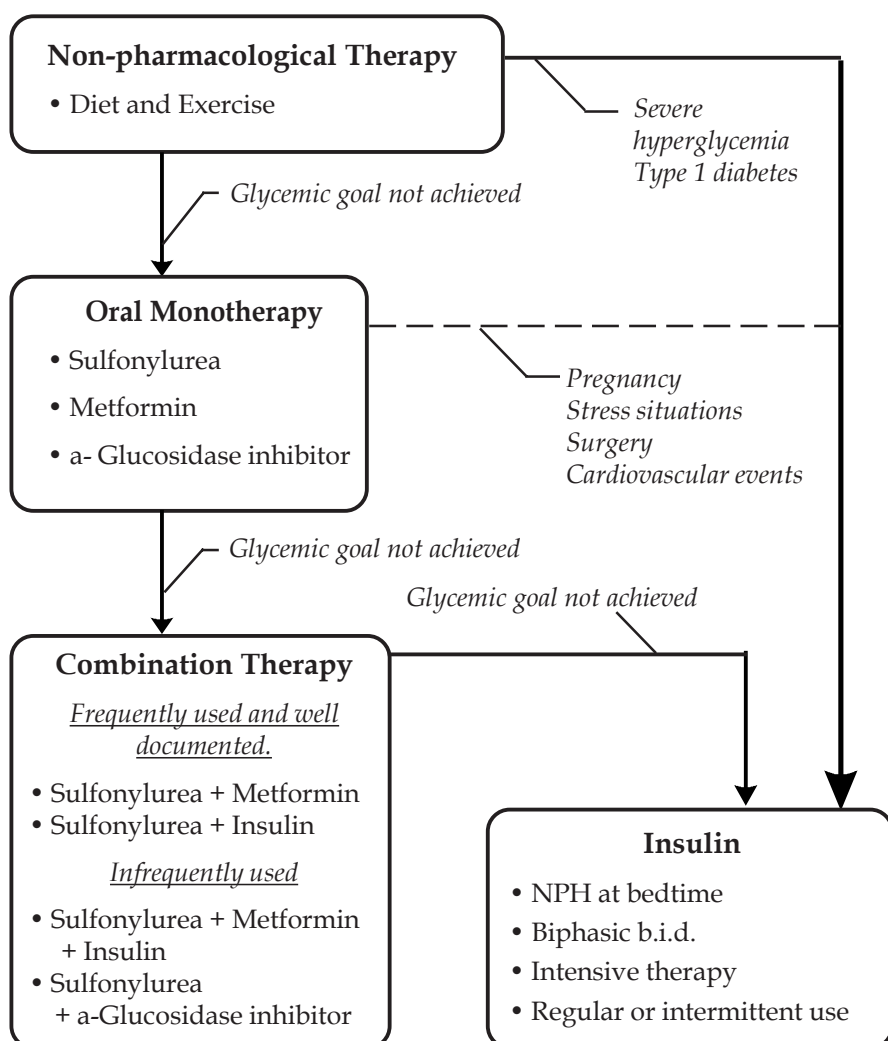
All diabetic subjects must undergo regular physical and laboratory examination. Medical check-up should include the feet, skin, retina, and cardiovascular, renal, and neurological systems. This is also the right occasion to review the personal blood sugar record, critically evaluate pre-meal and post-prandial blood glucose levels, body mass

index, diet, exercise programme, and in young patients their growth. Women may need a gynecology review.

Glycosylated hemoglobin (HbA1C) measures the glucose bound to hemoglobin. The bound glucose remains in the conjugated state until the blood cells die and new ones replace them. Therefore, HbA1C reveals the status of long term glucose control. Patients who report fasting glucose levels persistently below 115 mg/dL (6.4 mmol/L) and yet have HbA1C levels above 7 % may exhibit substantial post-prandial hyperglycemia. When the mean level of HbA1C declines to about 7 per cent, the incidence, onset, and progression of complications reduce by 50 to 80 per cent.

Iatrogenic hypoglycemia events require careful adjustment of medication. This is more critical in patients whose blood glucose levels often fall below 70 to 80 mg/dL (3.9 to 4.5 mmol/L) before breakfast, or during exercise, or with alcohol consumption, or with delayed meals. Bed-time and pre-breakfast glucose measurements are very sensitive monitors in hypoglycemia prevention programmes.

### PATIENT MANAGEMENT ALGORITHM



**9th RSSDI Course  
in Diabetology**

by Dr. Pradeep Y.R. Mulay at  
Government Medical College,  
Aurangabad in September 1998  
*approved for 20 RSSDI credit hours*  
register by sending draft for Rs.1000  
favoring **Diabetes Forum** to  
Dr. Sanjeev A. Indurkar  
Behind MSFC - Station Rd  
Rachanakar Colony  
Aurangabad 431 005 MS  
tel 0240 333124 335030 332772

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**INTERNATIONAL JOURNAL OF  
DIABETES IN DEVELOPING  
COUNTRIES**

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We request medical teachers, researchers and scientists to send us a few articles a year for publication. These could be in the form of original articles, comprehensive reviews or case reports. If your busy schedule does not permit you to submit materials to us we would appreciate it if you could encourage other junior doctors to work under your guidance and to submit their work for publication.

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**LIFE MEMBERSHIP**

Life Membership payment is Rs.1500, and Corporate Member- ship payment is Rs.100,000 by draft favoring RSSDI to be sent to the Secretariat.