

# DIABETES MONITOR

2009 Issue No. 4



*Dr. Mohan's*  
DIABETES SPECIALITIES CENTRE

WHO Collaborating Centre for Non-communicable Diseases Prevention & Control  
International Diabetes Federation Centre of Education

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on behalf of DIRECT,  
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## INAUGURATION OF INTERNATIONAL DIABETES FEDERATION [IDF] CENTRE OF EDUCATION

&

## 16th DMDSC GOLD MEDAL ORATION AWARD FUNCTION



The 'IDF Centre of Education' certificate was presented to our Chairman Dr. V. Mohan by Prof. Jean Claude Mbanya, President, IDF at the 20<sup>th</sup> World Diabetes Congress, at Montreal, Canada in Oct 2009.

The International Diabetes Federation (IDF), Belgium, is an organization of over 200 national diabetes associations in over 160 countries, which is engaged in action to tackle diabetes from the local to the global level. IDF recently decided to recognize Institutes of Excellence, which provides high standard of education for healthcare providers in Diabetes. This year IDF has designated six centres all over the world as 'IDF Centre of Education' to form part of an international collaborative network to initiate, facilitate, conduct and coordinate high-quality education for healthcare professionals in diabetes.

Acknowledging the specialized education and training undertaken in diabetes and its complications by **Dr. Mohan's Diabetes Specialities Centre [DMDSC] and Madras Diabetes Research Foundation [MDRF]**, the IDF has declared our centres as an 'IDF CENTRE OF EDUCATION'. Ours is the only centre in India to be designated. The newly identified centres were honoured and acknowledged at the **IDF 20<sup>th</sup> World Diabetes Congress** held at Montreal, Canada on October 2009 and the declaration certificate was presented to our Chairman **Dr. V. Mohan**.

**Prof. Jean Claude Mbanya**, President of International Diabetes Federation (IDF) and Professor of Medicine, Endocrinology and Diabetes, University of Yaounde, Cameroon inaugurated the 'IDF Centre of Education' at a function held by our centre on November 3<sup>rd</sup> 2009 at Taj Connemara, Chennai.



Prof. Jean Claude Mbanya, President, IDF unveiled the plaque and declared our centres as 'IDF Centre of Education'. Also in photo from left to right: Dr. Shashank R.Joshi, Consultant, Lilavati Hospital, Dr. Ranjit Unnikrishnan, Director, DMDSC & MDRF, Dr. R. M. Anjana, Director, DMDSC & MDRF, Dr. V. Mohan, Chairman, DMDSC & MDRF, Dr. Ashok Kumar Das, Medical Superintendent, JIPMER

**Dr. Ashok Kumar Das**, Medical Superintendent and Senior Professor of Medicine, Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER), Puducherry and **Dr. Shashank R. Joshi**, Consultant, Endocrine & Metabolic Physician, Lilavati Hospital, Mumbai, Vice President, Research Society for the Study of Diabetes in India, Mumbai and President, All India Association for Advancing Research in Obesity were the **Guests of Honour**.



Dr. V. Mohan presenting the 16<sup>th</sup> DMDSC Gold Medal Oration to Prof. Mbanya

During the function, **Prof. Jean Claude Mbanya**, was honoured with the **16<sup>th</sup> Dr. Mohan's DSC Gold Medal Oration Award**. This Award was instituted in 1994 in order to honour distinguished International Medical Scientists every year. This year the Dr. Mohan's DSC Scientific Committee selected Prof. Jean Claude Mbanya for this Award. This award was bestowed on him for his outstanding contributions in the field of diabetes, particularly in the developing countries. Prof. Mbanya delivered the Oration on the topic 'Are we witnessing global diabetes pandemic?' describing the





Dr. Ashok Kumar Das launched the MDRF website and addressed the gathering

escalating threat that diabetes poses globally and the action plans to address the epidemic.

On this occasion, **Dr. Ashok Kumar Das** launched the website of **Madras Diabetes Research Foundation (MDRF)**. The website [<http://www.mdrf.in/>] provides details on various departments, major achievements of MDRF and its publications in peer reviewed journals during the last 10 years

**MULTIPLE PROGRAMMES FOR WORLD  
DIABETES DAY ORGANIZED  
BY DR. MOHAN'S DIABETES SPECIALITIES CENTRE  
"Diabetes Education and Prevention"**

Massive free screening and public programmes on Diabetes and associated complications organized on 'World Diabetes Day' by Dr. Mohan's Diabetes Specialities Centre, Chennai. 'World Diabetes Day' is celebrated globally on 14<sup>th</sup> November, with the aim of coordinating diabetes advocacy worldwide and the global awareness campaign of the diabetes prevention and care.

This year the **World Diabetes Day 2009**, campaign, centered on the theme "Education and Prevention" promotes to raise awareness of the warning signs of diabetes and to promote actions to encourage early diagnosis. It is a call for the public to understand the serious impact of diabetes and to avoid or delay diabetes and its complications. People with diabetes must



Free blood screening camps at full swing: Diabetes screening camps for the public in different places at Chennai & Hyderabad



deliver 95% of their own care, so it is of paramount importance that they receive ongoing, high quality diabetes education that it is delivered by skilled health professionals. To illustrate the importance of evidence based education in the prevention and management of diabetes, extensive range of activities were organized.

**Large scale diabetes awareness & screening camps** were conducted at various places at Chennai on 14<sup>th</sup> November, including Valmiki Beach (Thiruvanmiyur), Beasant Nagar Beach, Ashok Nagar Park, Nageswar Rao Park, Natesan Park, Thiru-Vi-Ka Park, Gandhi Park, Kotturpuram Park, SBI – Corporate Office. And on 15<sup>th</sup> November 2009 Jeevan Park, Marina Beach near Presidency College, Boat Club Road, Marina Beach near Gandhi Statue, Independence Day Park, Valluvarkottam, Tower Park, Anna Nagar and Velachery 100 ft. Road.

**Quiz programmes** on diabetes and diabetic retinopathy were held at Gopalapuram, Annanagar and Hyderabad



Quiz Programme on Diabetes and Diabetic retinopathy conducted at our centre

branches and prizes were distributed to the winners.

In addition, **physical activity sessions** were organized by our Fitness Consultants at Gopalapuram, Annanagar and Vellore branches. **Live yoga demonstration**



Dr.M.Rerna, Managing Director, DMDSC awarding the prize to the winner

was also conducted for the benefit of the public at the auditorium of the Dr. Mohan's Diabetes Specialities Centre by Ms. Sasiprabha on the 16<sup>th</sup> in Gopalapuram, 17<sup>th</sup> at Anna Nagar and on the 18<sup>th</sup> at our Tambaram branch.



Fitness Consultant teaching exercises at our centre

On the occasion of this key awareness-raising event for diabetes, to increase awareness on the importance of healthier lifestyle, a **WALK** was taken out in the evening at Chunampet, Vellore and Hyderabad. School students from different institutions, public and staff from DMDSC/MDRF actively participated in this awareness rally and carried placards emphasizing on the merits of healthy lifestyle involving a balanced diet, exercise, periodic health check-up etc.





Awareness walk in Chunampet and Vellore



Live demonstration of **healthy low calorie recipes** was organized at our main



Live recipe demonstration conducted at our centre

program was to educate participants about the specific concepts related to diabetes. For the benefit of patients in the wards **Group therapy program** was conducted using conversation map as a tool. Disadvantaged communities and vulnerable groups were provided with appropriate diabetes care, prevention and education through **puppet shows** at our Tambaram and Chunampet branches.

Thus these events play an important advocacy role in building support and

centre Gopalapuram and Annanagar and Vellore branches. The main goal of this



Educating the public through Puppet Show.



Group therapy in progress.

commitment at all levels in response to the needs of people living with diabetes and the communities affected by the disorder.



## MDRF SCIENTISTS PARTICIPATE IN RESEARCH SOCIETY FOR THE STUDY OF DIABETES IN INDIA (RSSDI) ANNUAL CONFERENCE

The 37th Annual Conference of the RSSDI was held in Ahmedabad from 5th to 8th November 2009. RSSDI is the largest Indian organization of diabetes health care professionals and researchers. Eminent health care professionals involved in diabetes research participated in this prestigious meeting.

A team of 15 scientists including Dr. V.Mohan, Dr. M.Reman, Dr. R. M. Anjana, Dr. Ranjit Unnikrishnan.I, Dr. M. Balasubramanyam, Dr. Radha Venkatesan, Dr. R. Rajalakshmi, Dr. R. GuhaPradeepa, Mrs. S. Poongothai, Mrs. Sudha Vasudevan, Dr. V. Aravindan, Dr. K. Gokulakrishnan, Dr. Priya Mirinda, Mr. M. Balakumar and

Mrs. Ranjani Harish, from the MDRF, Chennai participated in this meeting. A total of fifteen oral and poster presentations based on MDRF research were made at this meeting. The posters titled "MIXED TH1-TH2" TYPE SERUM CYTOKINE PROFILE AMONG T2D SUBJECTS" by Surendar J, Aravindhan.V & Mohan. V & "OXIDATIVE STRESS INDUCES ACCELERATED SENESCENCE AND TELOMERE SHORTENING IN ADIPOCYTES" by Finny Monickaraj. S, Ganesan.S, Aravind. S, Nandhini.P, Mohan. V & Balasubramanyam M. presented by our MDRF Scientists received the 1<sup>st</sup> and 3<sup>rd</sup> prize at the conference. All the presentations were very well received and appreciated by the scientists who attended the conference.

### Tips Corner...✍

## TIPS FOR HEALTHY EATING

- ◆ Start meal with soup to fill you before the main course.
- ◆ Snack only if physically hungry, not because the clock tells it is time to eat.
- ◆ Make lunch your target meal of the day and eat a small dinner.
- ◆ Balance your food intake throughout the entire day.
- ◆ The disease fighting antioxidants called catechins in green tea may help decrease body fat.
- ◆ Prefer water as the cooking medium over oil and prefer stir fry with minimal oil.
- ◆ Calcium rich diets reduce fat producing enzymes and increase enzymes that break down fat.
- ◆ Use fat free milk over whole milk
- ◆ Walk during lunch hour
- ◆ Drink water before meal
- ◆ Avoid food portions larger than your fist
- ◆ Increase the fiber in your diet
- ◆ Eat off smaller plates
- ◆ Do not eat late at night
- ◆ Skip seconds
- ◆ Grill, steam or bake instead of frying
- ◆ Make a grocery list before you shop
- ◆ Flavour foods with herbs, spices and other low – fat seasonings
- ◆ Eat before you get too hungry
- ◆ Do not skip breakfast
- ◆ Stop eating when you are full
- ◆ Snack on fruits and vegetables.
- ◆ Make half your grains as whole grains
- ◆ When eating out, choose a small or medium portion
- ◆ Try a green salad instead of fries.





## **DMDSC CROWNED THE BEST PRIVATE HOSPITAL IN DIABETES CARE**



*Dr. Mohan's Diabetes Specialities Centre has been recognized, as the country's best private hospital in Diabetes care according to the Week-IMRB survey, conducted in Nov 2009. It is a great recognition for our services and commitment to our patients. It is great honor for Chennai that one of the finest hospitals is in Chennai and is leading the nation in the field of Diabetology.*

*Hearty Congratulations to our Founders Dr. V. Mohan and Dr. M. Rema and the entire DMDSC team and best wishes for a continued excellent service to our patients.*

### **FELICITATION TO DR. MAYIL VAHANAN NATARAJAN ON BECOMING VICE-CHANCELLOR OF TAMILNADU DR.M.G.R MEDICAL UNIVERSITY**



*Dr. Mayil Vahanan Natarajan being felicitated  
by our Chairman, Dr. V. Mohan for his taking over as the  
Vice-Chancellor of the Tamilnadu Dr.M.G.R. Medical University, Chennai*





## CURRENT SITUATION AND RECENT DEVELOPMENTS OF DIABETES MANAGEMENT IN INDIA

### Key Points:

- India with 50.8 million people with diabetes leads the world with the maximum number of cases of diabetes.
- Balanced approach to improve awareness about diabetes and its control both among patients and the medical fraternity is urgent need in India
- Unique teaching tools have to be developed to create awareness among public regarding Diabetes

### CURRENT SITUATION OF DIABETES IN THE COUNTRY

The prevalence of diabetes is rising rapidly all over the world and has reached epidemic proportions particularly in developing countries like India. Indeed, India with 50.8 million people with diabetes leads the world with the maximum number of cases of diabetes in any country in the world and this number is set to increase to 87 million by the year 2030 according to the recently published Diabetes Atlas by International Diabetes Federation (IDF). Moreover, type 2 diabetes in the Indian population appears to occur at least a decade earlier compared to Europeans. This means that, in the next 10–20 years, productivity of the youth of our country could be seriously affected. Due to these sheer numbers, the economic burden due to diabetes in India is among the highest in the world.

### RECENT DEVELOPMENTS & EMERGING TRENDS IN THE DIABETES MANAGEMENT

#### Newer tablets!

Prior to 1994 selecting an oral agent for the treatment of type 2 DM was as simple as choosing which sulfonylurea (SU) to use. Since then, a variety of newer agents with unique mechanisms of action and even some combination agents have been released for use as monotherapy or in any number of combination regimens. Three ways in which these agents work towards improving glycemic control include, increasing insulin secretion [insulin secretagogues], increasing insulin action [insulin sensitizers], and decreasing insulin need [inhibitors of glucose absorption].

Different classes of anti-diabetic agents are currently being used in the treatment of type 2 diabetes. This includes biguanides (metformin), glitazones and alpha glucosidase inhibitors. However, current therapies for diabetic management are frequently associated with inadequate control of hyperglycemia, weight gain and waning of efficacy over time.

Better understanding of the physiological responses to food has led to the development of newer agents like incretins. Incretin-based therapies, which are based on the enhancement of gastrointestinal hormone action and thereby improving glycemic control with their unique





pathophysiologic targets, have rapidly evolved into a valuable therapeutic option to achieve better glycemic control. This includes two classes of drugs : GLP-1 analogues which belong to the new class of injectable drugs called incretin mimetics, as they mimic the action of human gut hormones or incretins and DPP-IV inhibitors, the recently released group of oral drugs that act by indirectly increasing the action of gut hormones such as GLP-1 and GIP.

Other newer therapeutic measures include : slow release preparations of existing oral drugs and short acting and long acting insulin analogues.



Insulin Pens

### New insulin-delivery systems

Several new insulin-delivery systems are under development that may eliminate the need for needle-based introduction. **Insulin pens**, which are compact, self-contained devices resembling a writing instrument, are convenient, more accurate and less painful. They allow patients to inject more discreetly without using bottles and painful syringes.

Another breakthrough is the **insulin pump**, which offers diabetic patients less discomfort and improved blood glucose

control. The insulin pump is a small pager or mobile sized electronic device which delivers insulin from a reservoir inside the pump, through a thin plastic tube (called an infusion set), to the body. Insulin pump delivers insulin like a healthy pancreas, provides more effective, safe and predictable insulin absorption for many patients, making it easier for patients to keep their blood glucose levels within a near-normal range, offering both short and long-term health benefits. Pump therapy can replace insulin shots for many patients, allowing them to live a more flexible lifestyle. Moreover the insulin pump is so comfortable that people adapt easily to life with a pump. Ideally all type 1 diabetic patients should be treated



Insulin pump worn by a patient

with a pump. However, pumps are presently quite expensive and this limits their usage to those who can afford.



**Dr. V. Mohan**, Chalmán,  
Dr. Mohan's Diabetes Specialities Centre





## CONTROL DIABETES- IT IS EASY THROUGH HbA1c

### Key Points:

- HbA1c test is simple and effective tool in diabetes monitoring.
- Higher the HbA1c value, poorer is the diabetic control and also greater is the risk of heart, kidney, nerve and eye damage.
- One can lead a longer and a happier life if get tested for HbA1c regularly.

With epidemic of diabetes in India, the risk of diabetes related complications can be prevented with good management of blood glucose levels, blood pressure and blood lipids. HbA1c test is simple and effective tool in diabetes monitoring. When a part of the blood glucose combines with hemoglobin, it forms a complex called glycosylated hemoglobin, also called as HbA1c or A1c value which is usually expressed as a percentage. The amount of HbA1c is directly related to the average concentration of glucose in the blood. The HbA1c value is fairly stable for a period of two to three months and therefore is an indication of the long term diabetic control over the past two to three months.

### IMPORTANCE OF HbA1c:

A recent study revealed that many patients do not know the results of their HbA1c test. This is unfortunate because knowing the value of HbA1c is just one more way that one can participate in their care and make sure that the sugar levels are under good control. People with diabetes who have a test result that is greater than 8% need to

work with their health care provider to change their treatment plan. When people with diabetes have a test result that is less than 7%, their treatment plan is probably working and it is likely that their blood sugar is under good control.

A normal person usually has an HbA1c value between 4-6%. However, this value is expected to be higher than 6% for a diabetic. Higher the HbA1c value, poorer is the diabetic control and also greater is the risk of heart, kidney, nerve and eye damage. Therefore, any decrease in HbA1c level is good for your long term health, but you should aim for a value below 7% for a longer and happier life.

### There are many benefits of monitoring the diabetes based on the HbA1c value:

- Long term picture: HbA1c value indicates the diabetes control status over the last 60-90 days, as against just a few hours in case of glucose test. Moreover, the HbA1c value does not fluctuate. Therefore the doctors find it easier to determine the long therapy based on your HbA1c test report.
- Fasting not required: The HbA1c test can be done anytime. No fasting is required before you give your blood samples.
- Not affected by just administered drugs: unlike a glucose result, the HbA1c result is not affected by medication taken before the test. So no need to disturb the daily schedule of medicines.



**To sum up, the HbA1c value is not affected by:**

- Time of the day at which blood sample is given
- Meal intake at the time of sample is given
- Exercise
- Just administered diabetes drugs
- Emotional stress

But it doesn't mean that the blood glucose tests are not important. Blood glucose tests are important too. HbA1c test gives the picture of the long term diabetes control; the blood glucose result gives the picture of the current glucose level in the blood so as to help maintain the normal blood glucose level throughout the day. This help in not getting hypoglycemic (lower level of glucose in blood than normal) and also to see how the

food, exercise and medicine are affecting blood glucose day-to-day. Keeping a track of HbA1c value at least 4 times a year as recommended by American Diabetic Association (ADA) ensures that one takes the right medicines to control diabetes and avoid complications.

**ONE CAN LEAD A LONGER AND A HEALTHIER LIFE, IF TESTED FOR HBA1C REGULARLY!!!**



**Dr. Mahesh Omprakash Baheti**  
Fellow Diabetologist  
Dr. Mohan's Diabetes Specialities Centre



## CHILDHOOD OBESITY AND TYPE 2 DIABETES

Recent research studies have revealed that a gene known to cause Type 2 diabetes has been found to increase the risk of being overweight during childhood. This particular gene is acting during childhood that lays the foundation for the later development of type 2 diabetes. In order to combat overweight and obesity among children and adolescence, we (parents, teachers, physicians, researchers etc.,) should co-ordinate and work together in the following areas to prevent them getting diabetes and other disorders in future.

**Reasons and some signs that may help to determine if the child has or is at risk for childhood obesity:**

1. Family history of obesity-related health risks such as early cardiovascular disease, high cholesterol, high blood pressure levels and type 2 diabetes.
2. Family history of cigarette smoking and sedentary behaviors.
3. Skin disorders like heat rashes, dermatitis and acanthosis nigricans (ugly or dirty skin on the neck and axilla region).
4. Psychological / Psychiatric Issues like poor self-esteem, negative self-image, depression, and withdrawal from peers have been associated with obesity.
5. Patterns of sedentary behavior (such as too much television viewing) and low physical activity levels.



6. Low self confidence and inferiority complex may lead to over eating, anorexia nervosa etc.,

#### A healthy well-balanced diet for children

Parents concerned about their child's weight should encourage a variety of fresh, nutritious foods in his or her diet. The following tips may be useful:

- Starchy foods, which are rich in "complex carbohydrates", are bulky relative to the amount of calories they contain. This makes them filling and nutritious.
- Sources such as bread, potatoes, pasta, rice and chapatti provide half the energy in a child's diet.
- Instead of high-fat foods like chocolate, biscuits, cakes and crisps, try healthier alternatives such as fresh fruit, crusty bread or crackers.
- Try to grill or bake foods instead of frying. Burgers, fish fingers and sausages are just as tasty when grilled, but have a lower fat content. Oven chips are lower in fat than fried chips.
- Avoid fizzy drinks that are high in sugar. Substitute them with fresh juices diluted with water or sugar-free alternatives.
- A healthy breakfast of a low-sugar cereal (e.g. whole meal wheat biscuits) with milk, plus a piece of fruit is a good start to the day.
- Instead of sweets, offer dried fruit or tinned fruit in natural juice. Frozen yoghurt is an alternative to ice cream.

#### Healthy Eating Environment

A well planned meal with foods that contribute to children's well-being can be one of life's greatest pleasures. To make meal time pleasant, create a healthy food

environment. When children are exposed to healthy foods early, they are more likely to develop habits that support healthy weight as they grow. Set meal time, choose the foods offered, and assure an inviting place to eat. Encourage eating slowly, with enjoyment. Avoid forcing children to eat. Help the children participate in the meal by serving themselves and provide wholesome choices and allow them to decide which food and how much to eat. Completely avoid TV watching and computer games while eating.

#### SAMPLE DIET PATTERN

**Breakfast** – Idli-3/Dosai-2/Roti-3/Chapathi-3/Upma/popa-2 cups with chutney or dhal-1 cup, vegetable – 1 cup, milk-1 cup  
**(350 kcal)**

**Midmorning** – Roasted/sprouted gram – ½ cup, fruit – 1 or 2 = 100gms, biscuits – 3 to 4, vegetable sandwich – 2 slices  
**(100 kcal)**

**Lunch**- Rice – 2 cups/ Roti -2 and Rice – 1 cup/Phulka – 4/ with dhal – 1 cup/Sambar- 1 cup, vegetable – 1 cup, greens – 1 cup/egg - 1/chicken/fish-100gms  
**(450 kcal)**

**Evening** – Dosai -1/Sandwich – 2 slices/Roasted grams- 1 cup/puffed rice with roasted grams/vegetable cutlet – 2/Idli upma – 1 cup  
**(200 – 250 kcal)**

**Dinner**- same as lunch + milk – 1 cup, (500 kcal)

Fat – 20ml-180kcal

**Total calories- 1800 kcal**



**Amudha. A**  
Research Fellow, MDRF





## RICE FLAKES DHAL CUTLET

### Ingredients

Thin rice flakes	- 50 g	Chilli powder	- 1 tsp
Bengal gram dhal	- 25 g	Garam masala	- ½ tsp
Carrot	- 15 g	Oil	- 1 tsp.
Beans	- 15 g	Salt to taste	

### Method:

Cook Bengal gram dhal with less water and keep aside. Soak rice flakes in water for 5 sec. and strain the water. Mix the cooked dhal and rice flakes and mash them well. Saute the chopped beans and carrot with little oil and add garam masala, salt and chilli powder to it. Add the saute vegetables to the rice flakes mixture and make it into dough. Make the dough into lemon size balls and flatten them. Shallow fry on both sides till golden brown. Serve hot

### Nutritive Value/ Serving

Energy	- 173Kcal	Portion size	- 2
Carbohydrates	- 59.5 g	No of serving	- 1
Proteins	- 9.7 g		
Fats	- 7.5 g		
Fibre	- 1 g		



**Nandhini**  
Dietitian, DMDSC

## Tips Corner...

### GROCERY SHOPPING GUIDE

- Preparing healthy meals at home begins with a trip to your local supermarket, where you can find all the vegetables, grains, lean meats, low-fat dairy products, and other ingredients you will need. However, you can also find a lot of foods at the grocery store that could compromise your diet. From the snack food aisle to the frozen food section, supermarket shelves hold plenty of high calorie, high fat, and high sodium traps. Fortunately, it takes just a few simple rules of thumb to make healthy choices a breeze.
- The key to making sure you buy the healthy foods you need – while avoiding the impulse purchases you do not – is to plan ahead. Before you set out to the grocery store, follow these tips: Make a list of all the items you need for the week or month. Check your pantry to see if you already have any items on the list. If you do, remove or cross off those items.
- Do not shop when you are hungry. Keep a list of high fiber, low fat items and their brand names.
- Focus on fresh foods rather than processed foods.
- Stick to your list. Your goal should be to get everything on your shopping list while limiting the items you do not plan to purchase. The items you might be tempted to add to your cart are likely to be high in fat, salt, sugar and calories.
- Check your list before you get to the bill counter. Making sure you got everything you need could save you another trip to the grocery store later in the week.
- Buy only the quantities you need. "Family size" packages may be more economical, but could tempt you into eating more than you intended. Look for single-serving packages of the foods of which you have the most difficulty in controlling the portion size.
- Grocery stores often stock their displays with high calorie, high fat and high sugar items.
- When possible, carry a small basket instead of pushing a cart- so there will be less room for items you did not to plan to buy.



## STAFF APPRECIATION



**Ms. Inbam Suguna** pursued her Diploma in Physiotherapy from Andhra Mahila Sabha, Chennai and joined our organization as Physiotherapist in the year 1994. She has excellent

ergonomics skills and patient's satisfaction is her prime motto. Her evaluation & understanding patient's problem is remarkable. She is having an extensive experience of managing cases related to Orthopedic, Neurological and Cardio pulmonary rehabilitation. Her colleagues comment that "she strives continuously to achieve the best for her patients and deals admirably with difficult situations. She is able to make any situation more bearable through her practical, caring and immensely positive approach to treatment." Her humble stature and devotion to the profession can clearly be seen in her selfless service to patients.



**Ms. Valli** joined DM DSC in 1994 as an Eye Technician and currently she is the Manager-Clinical Operations, Indira Eye Institute, a unit of Dr. Mohan's Diabetes

Specialities Centre. She is associated with our centre for over 15 years and is in-charge of overall supervision and maintenance of Indira Eye Institute. Ms. Valli is a woman of sincerity and hard work; she puts her best in every deed. Indeed a simple, trustworthy person like her is a priceless asset for the growth of our institutions. She plans work schedules for the eye Technicians and arranges for the training for her departmental staff. She takes great care in ensuring that the patients receive proper care and attention. Cheerful approach, sincerity and commitment to her profession are praiseworthy.

## Patient Corner...✍

### "DIABETIC SWEETS"

*To my aged Diabetic friends*

Friends,  
Enough is your experience  
And enough is your wisdom,  
To tackle and evade  
This cunning, greedy, uninvited guest,  
Walk carefully and watchfully.  
See that, any piece of glass or bit of iron  
May not prick and pierce into your foot,  
And if so, have the treatment immediately  
To avoid worse, like septic and then to amputation.  
With loss of teeth, and loss of digestion,  
Satisfy with suitable diet for your age  
Like salads, juices and greens,  
But never ape or compete with gluttonies

And thereby suffer from digestive troubles.  
Follow strictly, like principles D-M-E & check ups,  
Postpone never routine daily exercises,  
But do it as per your convenience and ability  
Keep distance, from fears, worries and anxieties  
And lead the rest of life, happily and merrily  
By the co-operation of your doctor and mercy of God.

**C. Kuppuramaiah**  
Patient





## Frequently Asked Questions

### 1. Can I use low calorie sweeteners?

**Ans:** Low calorie sweeteners are safe for everyone except pregnant women and children who should not use aspartame. Calorie free sweeteners like aspartame, saccharin, sucralose and acesulfame-K will not increase your blood glucose level. The sugar alcohols – xylitol, mannitol and sorbitol – have some calories and do slightly increase your blood glucose level. Eating too much of any of these can cause diarrhoea.

### 2. What are trans fats and what is the truth about trans fat free foods?

**Ans:** Trans fats are of two types – the naturally occurring type found in small amounts in dairy and meat and the artificial kind that results when liquid oils are hardened with “partially hydrogenated” fats during hydrogenation – a technique that makes a fat solid when at room temperature. Trans fats are used extensively in fried foods, baked goods, microwave popcorn and some margarine. These artificial trans fat could increase the risk for heart disease by increasing “bad” LDL cholesterol and decreasing “good” HDL cholesterol. Even though the label in many of the products in a grocery shop states “zero trans fat”, one serving of the food can contain upto 0.5gm of transfat, according to law and still be labeled as “transfat free”. Only when the food label states “no trans fats” does it really mean

there are none. The problem is that small amounts of these artery clogging fats can add up quickly, especially if you eat several servings each day of foods that contain upto 0.5gm per serving.

### 3. I am a diabetic for the last eighteen years and 45 years old. My last six months blood report shows an increasing level of blood urea from 39 to 62 and the serum creatinine from 0.9 to 1.3. Is this a sign of failing kidneys? What precautions should I take?

**Ans:** The first test to do to diagnose kidney involvement in diabetes is to test for protein in the urine. In case the routine test is negative, a further special test should be done known as urinary microalbumin. Urine microalbumin is most sensitive test for detecting early kidney involvement. If there is kidney involvement, the different aspects by which you can reduce urea/creatinine, include reducing protein intake, having strict control of diabetes and blood pressure, and also taking medication prescribed by your physician.

### 4. I am a diabetic, if I take sweet once in a week does it harm? Now a days sugarless sweet are available. Is it recommended for diabetic patients?

**Ans :** To take sweets once in a while does not harm you, if your blood sugars (i.e.) HbA1C



(three months average) is below 7.0%. Sugarless sweets are recommended for diabetic patients with regard to their cholesterol levels because in order to make the sweets palatable, sweeteners and more amount of ghee and dalda are used. For diabetic patients it is better to take home made sugarless sweets.

**5. How do patients with diabetes develop severe foot infection and why should they worry about it?**

**Ans :** Diabetes alters the immune system, thus decreasing the body's ability to fight infection. The body's processes that normally fight infection respond slower and often have trouble getting to infections due to the poor circulation. Both ischaemic and neuropathic lesions are complicated by

infection. In patients with the case of poor blood circulation once infection sites in, it is again a serious problem and could result in amputations.

As subjects with neuropathy lose their sensation most of the foot problems remain without the normal warning signs of pain and this could lead to severe infections. In our experience unexplained high blood sugar in diabetic patients could be due to unnoticed infections which some times occurs even without fever. Infection to diabetic foot ulcers may be either superficial or deep and sometimes life threatening. Common symptoms of infection are fever, redness, swelling or pain. Pus may also be seen in the lesions.



**Dr. Mohan's®**  
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To

**Dear Readers, we invite your contributions to 'Diabetes Monitor' in the form of Diabetes related queries, anecdotes or personal experiences. Please send / email:**

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