# DIADETES DIADETES MONTOR 2010 Issue No. 3





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# 'DIABETES 2010' AN EXPO TO CREATE AWARENESS ON DIABETES



Honourable Health Minister of Tamil Nadu Thiru. M. R. K. Panneerselvam inaugurating the 'Diabetes 2010' at Chennai. Also in picture from left - Thiru. M. Subramanian, Worshipful Mayor, Chennai, Dr.Ranjit Unnikrishnan, Director, DMDSC, Dr. R. M. Anjana, Director, DMDSC, Dr.V.Mohan, Chairman, DMDSC and Dr. T. N. Ravishankar, Director, Deepam Hospital, Chennai

Diabetes mellitus is growing in epidemic proportions and rapidly becoming an important cause of morbidity and mortality worldwide. Diabetes can affect several organs in the body particularly the eyes, kidneys, feet, heart and nerves. In developing countries like India it often disproportionately affects the poor, and young in the peak of their lives. This could adversely affect the productivity and economy of these countries. This emphasizes the need for early detection of diabetes and tight control of diabetes from the beginning. However

awareness levels about diabetes still remain low and over 20% of patients develop serious diabetic complications. The need for raising awareness about diabetes on a massive scale is therefore obvious.

In order to spread awareness about diabetes among the public, a mega Diabetes Public Awareness Program called 'DIABETES 2010' was organized by Dr. Mohan's Diabetes Specialities Centre which is a World Health Organization (WHO) Collaborating Centre for Noncommunicable Diseases- 'Prevention and Control' and an International Diabetes Federation [IDF] Centre of Education. The mission of both WHO and IDF are to create public awareness and promote diabetes care and prevention. Accordingly, this was the SIXTH time this mega diabetes exhibition, considered the largest in India was organized by our Centre. The aim of organizing 'Diabetes 2010' was to showcase the latest developments in diabetic care through education & awareness and the theme was 'Take control of your diabetes Now!'

The mega awareness exhibition was in a u g urated by Thiru. M.R. K Panneerselvam, Honourable Minister for Health and Family Welfare, Government of Tamil Nadu on 29<sup>th</sup> July 2010. Thiru. M. Subramanian, Worshipful Mayor, Corporation, of Chennai, Government of Tamil Nadu, Dr.T.N. Ravishankar, Secretary, Indian Medical Association,

Director, Deepam Hospital, Chennai, participated in the inaugural function.

A DVD on 'Exercise for diabetes' specially crafted for the benefit of diabetic individuals by R.M. Anjana, Director, DMDSC, was released on the occasion by Thiru. M. Subramanian, Worshipul Mayor of Chennai and the first copy was received by Honourable Minister Thiru. M.R.K Panneerselvam.



Worshipful Mayor **Thiru.M.Subramanian** releasing the 'Exercise DVD' for diabetes. Also in picture from left - Dr. R. M. Anjana, Dr. T. N. Ravishankar, Dr.V.Mohan, Honourable Minister Thiru. M. R. K. Panneerselvam and Dr. Ranjit Unnikrishnan

### HIGHLIGHTS OF 'DIABETES 2010'

INTERACTIVE SESSIONS: Interactive sessions between panel of eminent doctors including Diabetologists and Eye Specialists of the Centre and the public were the main highlights of the awareness programme. To increase the level of awareness on all aspects of diabetes and its complications, Diabetologists and Ophthalmologists of the Centre delivered lectures. Educational sessions covered vital topics such as What is Diabetes?, Management, Prevention, Complications and Life style modification of Diabetes, and Eye diseases and Diabetes.











Dr. R. Rajalakshmi delivering lecture on Eye diseases & Diabetes

**DIET GALLERY:** A Nutrition exhibition displaying the nutrition scenario of our country, nutritious diets for diabetic individuals with live demonstrations helped in creating awareness among the visitors who visited the Expo. Handouts on diabetes diet were distributed to the visitors. The dieticians in the diet gallery educated the public on the role of diet in diabetes management and had good interaction with them by answering the queries raised by them. Several posters on food, carbohydrates, high in fiber content, low glycemic index foods were displayed.

AWARENESS ON DIABETES: More than 30 theme stalls were displayed to educate the public and create awareness on diabetes related issues through models,









posters, charts and photographs. These stalls gave the visitors an insight into the latest options available for the treatment of diabetes and showcased new data on the diabetes pandemic and educated the public on diabetes and associated complications



**DIABETES SCREENING:** Screening for diabetes and its complications were offered to the public. Visitors actively participated in the preliminary investigations like on the



The state of the s

Screening for retinopathy at the exhibition

spot blood sugar testing and 'HbA1c test'. Tests like onsite availability of digital eye (retinal) photography and biothesiometry for testing eye diseases and peripheral neuropathy were also done at special discounted rates.

LIFESTYLE INTERVENTION SECTION: Life style modification through exercise is an effective strategy for management and prevention of diabetes.



Demonstration of Yoga at the exhibition.











Live yoga and aerobics demonstrations were performed for the public, by experts in the respective fields. They were very well appreciated and indeed were one of the popular events of the exhibition. Stress management sessions were conducted to equip a person with effective coping mechanisms for dealing with psychological stress.

# DISPLAY / SALE OF DIABETES PRODUCTS

At the 'Diabetes Shop' the following were available at massively discounted prices:



- Blood sugar monitoring equipments ·
- Dr. Mohan's Exercise DVD for Diabetes
- Special diabetic foot-wear
- Books and other diabetes related educational materials
- Sugar free products (chocolates, biscuits, jams, soft drinks etc.,)
- Dietary health supplements

In short, 'Diabetes 2010' proved to be an ideal platform for people to learn about this disease and was one of the most unique exhibitions on diabetes ever organized.



Blood sugar monitoring equipments and footwear for sale at Diabetes 2010

# FREE DIABETES CAMP CONDUCTED BY SRI SATHYA SAI TRUST AT SAI SRUTHI, KODAIKANAL ON 18<sup>th</sup> & 19<sup>th</sup> SEPTEMBER 2010



Motivated by Bhagawan Sri Sathya Sai Baba's message "Love All & Serve All", Sri Sathya Sai Trust actively organized an extremely successful FREE DIABETES CAMP for the poor and needy at Sai Sruthi, Kodaikanal on 18th & 19th September 2010, in collaboration with Dr. Mohan's Diabetes Specialities Centre, Chennai. A team of 32 members consisting of Diabetologists, Ophthalmologists, Dietitians, Diabetes Educators, Technicians, Nursing Staff and





Pharmacists rendered their services during the camp. People flooded the camp from early in the morning and continued to stream till evening. Registrations were done, followed by screening through random capillary blood glucose testing along with the assessment of Indian Diabetes Risk Score [IDRS]. A total of 614 people were screened out of which 56 were newly detected to have diabetes. 179 people underwent screening for diabetic eye disease and 205 people underwent screening for diabetic neuropathy. Free consultation and medicines were provided to the patients. The highlights of this camp were the diet exhibition and the diabetes recipe demonstration which were organized to emphasize the importance of diet in diabetes. Narayana Seva was done to all the people who attended the camp.

# A Glimpse of the Camp



Screening for diabetes





Free consultation to patients by Dr. V. Mohan, Chairman, Dr.Mohan's Diabetes Specialities Centre



Diet exhibition at the camp



Diabetes diet recipe demonstration



THE TEAM - Service to man is service to God







# Onam Ulshav 2010 at Dr. Mohan's Diabetes Specialities Centre

Dr.Mohan's DSC celebrated 'Onam Ulshav 2010' with lots of cheer and enthusiasm on 20th August 2010. The entire centre was decorated with colourful and fragrant *POOKOLAMS*. Staff from various departments joined together to form 10 groups and participated in this contest. The Kolams were judged based on various criteria by a panel, which included our Directors Dr.R.M.Anjana and Dr.Ranjit

Unnikrishnan, General Manager, Mr.N.Thanigaimani, Sr.Manager- Quality System, Ms.S.J.Parvathi and Head of the Department, Lab, Ms. Jayashri. For their exceptional pookolams, the Dahlias team won the FIRST Place, the Orchids team won the SECOND Place and the Lotus team won the THIRD Place. All staff enjoyed the entire event and exhibited their team spirit.

### 1st Prize Winners- Dahilas team





2<sup>nd</sup> Prize Winners- Orchids team





3rd Prize Winners- Lotus team





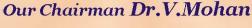




# Heartiest Congratulations

To





Who has been unanimously elected as the 'National Vice President' of the RSSDI and has also been conferred with the 'Best Teacher Award' by the Tamilnadu Dr.M.G.R. Medical University, for his outstanding contributions in the field of Diabetology



# DOCTORAL AWARD MDRF AND DMDSC FAMILY CONGRATULATES



Ms. ANURADHA SHEKHER

For being awarded the Ph.D., in Biochemistry and Molecular Biology by the University of Madras, Chennai

On 18th August 2010, Ms. Anuradha Shekher, supervised by Dr. Radha Venkatesan, Head, Molecular Genetics unit, Department of Biochemistry & Molecular Biology, Madras Diabetes Research Foundation was awarded her doctoral degree for her thesis entitled "Genetics Studies on Young onset Type2 Diabetes in South India"

We are proud of you!







# **MUSHROOM SAUTE**

# Ingredients

Button mushroom	- 200a	Chilly powder	<ul> <li>2 tsp</li> </ul>
Onions	- 100a	Garam Masala	- ½ tsp
Ginger	- a piece	Dhania powder	- 1tsp
Green chillies	- 2	Salt to taste	

Oil - 100 ml Skimmed curd Aiwain - 1tsp

## Method

Wash and cut mushroom into 4-5 slices. Heat oil in a pan. Add onion, green chillies, ginger and ajwain. Cook till onion turns into light brown in colour. Add mushroom, and little water. Cook till

mushroom is done. Add chilly powder, coriander powder garam masala and salt to taste. Add skimmed curds and cook till mushroom is dry and coated with curds. Serve hot with chappathi.

# **Nutritive value**

Energy	-	53 Kcal	Fat	-	1.7 g
Carbohydrate	-	6.0 g	Portion size	-	1 katori
Protein	-	2.5 g	No of serving	-	4

Dr. Saroja Raghavan HOD. Nutrition & Dietetics Dr. Mohan's DSC



- 1 tsp

# Staff Appreciation ... Z

# STAFF APPRECIATION



Ms. SASIKALA joined our institution in the year 1995 as a lab technician. Her sincerity, dedication and love for work has made her grow from a Lab

technician to Lab Supervisor. She is very professional and courteous in her work. Sasikala is an easy going person with personal attributes like enthusiasm and has a unique ability to motivate other employees. Her whole-hearted effort, politeness and hard work are admired and valued. She is an asset to our institution.

Ms. KIRUBA is associated with our institution since 1996. After completing her Auxiliary Nursing Midwifery course, she ioined our institution as ANM nurse. Kiruba can



always be seen sporting a smile which inspires the patients and her colleagues. She adapts herself to whatever work that has been assigned to her and gives her fullest contribution to it. She is a multifaceted personality. Cheerful approach, sincerity and commitment to her noble profession are praiseworthy aspects of Sr. Kiruba.







# A simple tool to identify your risk for development of diabetes

# Who is at high risk for diabetes? *Those who*

- · Are overweight
- Are 35 years old
- · Have a family history of diabetes
- · Physically inactive
- Are on steroids
- Are stressed up
- Have hypertension

If one falls into any of these categories, then the individual is among those at risk of having diabetes. The more one knows about the family's diabetes history, the more one can prevent/ delay the risk of developing diabetes. The American Diabetes Association (ADA) has recommended that if one has any of these risk factors, screening for diabetes should be done every year. Thus if one likes to learn more about the risk for diabetes get the IDRS (Indian Diabetes

Risk Score) done today! We, from the Madras Diabetes Research Foundation have developed the IDRS, which is a simple and powerful two-minute diabetes risk calculator that shows one, the risk for developing diabetes and to recommend diabetes screening among Indians. Take this test to see if you are at risk for having or developing type 2 diabetes. The IDRS is based on four simple questions and a waist measurement using an inch tape. The four questions are:

- 1. What is your age?
- 2. Do you have a family history of diabetes?
  - a. If yes, does your father or mother or both have diabetes?
- 3. Do you exercise regularly?
- 4. How physically demanding is your work [occupation]?

One can calculate the risk of developing diabetes based on the scores provides intable 1.

### TABLE 1

PARTICULARS		
Age [years] < 35 35 - 49 ≥ 50	0 20 30	
Abdominal obesity Waist < 80 cm [female] , < 90 [male] Waist <sup>3</sup> 80 – 89 cm [female], <sup>3</sup> 90 – 99 cm [male] Waist <sup>3</sup> 90 cm [female], <sup>3</sup> 100 cm [male]		
Physical activity Vigorous exercise [regular] or strenuous work Moderate exercise [regular] at home / work Mild exercise [regular] or at home / work No exercise and sedentary work at home / work		
Family history No family history Either parent Both parents	0 10 20	





A score of > 60 indicates that the individual is at very high risk for developing diabetes and an oral glucose tolerance test is recommended for diagnosis of diabetes. A score > 30 to < 60 indicates that the risk for having diabetes is moderate and if less than 30 then the risk for is probably low. This risk score is also available online at www.drmohans.com and therefore anyone can find out his/her risk of diabetes by using the risk score online. The waist circumference can be replaced with a pant [waist] size measurement in centimeters for men. In those who do not know their waist size, it can be measured using a simple inch tape around the navel area.

# One can prevent/ reduce the risk for diabetes by:

- Maintaining a very active lifestyle
- Walking at least for 30 minutes three times a week

- Reducing weight if overweight
- Eating diet rich in vegetables, fruits and whole grains
- Cutting down on fats, calories and sugar intake
- Follow traditional diet pattern instead of switching to western dietary patterns
- Reducing stress (through yoga, meditation, time management etc)
- Limiting television viewing and
- Screening for diabetes at regular intervals. In summary, a concerted effort by incorporating changes in life style and cultivating appropriate attitudes may contribute to prevention of diabetes.



Dr.V.Mohan, Chairman, Dr.Mohan's Diabetes Specialities Centre

# DIABETES RELATED EYE PROBLEMS

All structures of the eye are susceptible to harmful effects of diabetes. Diabetic individuals are prone to visual disability than non-diabetic individuals. Diabetes-related eye disease has a strong relationship to the control of blood sugar and duration of diabetes. Uncontrolled diabetes may lead to various eye problems affecting the lids, cornea, muscles, lens, retina and the nerves.

# Lids & conjunctiva

Individuals with diabetes are generally prone to acute infections of any kind especially when there is uncontrolled diabetes. The eyelids are more susceptible to infection and, hence, ulcerative blepharitis and stye are more commonly found in the diabetic individuals. Blepharitis, chronic inflammation of the eyelids is one of the primary causes for eye discomfort. Symptoms of blepharitis include: burning, itching, light sensitivity, and sandy, gritty sensation that is worse upon awakening. In



Scurf, or debris, found amid eyelashes in a patient with blepharitis

severe cases redness and stickiness of the eyelashes with discharge as shown in the photograph may be present. Good control of diabetes with simultaneous treatment of blepharitis will bring about a quick recovery.

Recurrent occurrence of small boils called as stye may be observed in the lids characterized by pain along the lid margin, which is followed by a swelling. Recurrent





styes are sometimes the first indications of diabetes and hence should prompt the individual to undergo blood tests. On control of blood sugar and with suitable antibiotics for the stye, the condition regresses. Another condition called as Chalazion manifests as small swelling inside the lids. This condition is painless unlike the stye, however, may get infected and painful if diabetes is persistently in the higher levels.

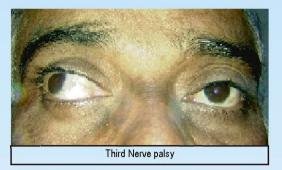
Redness of the eyes accompanied by discharge and stickiness of eyelids called as conjunctivitis is also common in diabetes. In addition, among diabetic individuals tear secretion can decrease as duration of

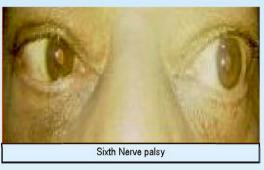


diabetes increases, which causes burning, stinging and discomfort. This can result in drying of the eyes and predispose to infection of the outer colourless portion of the eye called 'cornea'.

# Extra ocular muscle abnormalities

The extra ocular muscles around the eyeball that help in normal function of the eye are controlled by the 3\*, 4\* and 6\* nerves, which can be affected due to high blood sugar leading to nerve palsy. Nerve palsies is a condition that results in an inability to move the eyes in a particular direction. The onset may be sudden and patient has discomfort in the eye and may experience double vision. Nerve palsies due to diabetes





recover completely if blood sugar is normalized. However, the recovery period may vary from 3-6 months.

### Cornea

As diabetes can affect the nerves supplying outer surface of the eye, diabetic patients can have decreased sensation in the eye, which may predispose to weakness of the outer surface called as cornea. This decrease in sensation may predispose to bacterial corneal ulcers and difficulties with contact lenses. Indeed, diabetic patients who wear contact lenses must take extra care with lens hygiene and keeping the cornea moist and should seek advice early if any problem like irritation, blurring or redness develops.

# Pupil & Iris abnormalities

Iris is the coloured portion of the eye and it controls the opening called as the 'pupil'. The iris is like a diaphragm and it contracts and relaxes and determines the amount of light that enters the eye. In some diabetic individuals with long duration of diabetes it is difficult to dilate the pupils with drops to





examine the inner portion of the eye. This condition is called as 'autonomic neuropathy' and in this condition the patient may require more time and medication (drops) for dilatation. Pupillary dilation in diabetic patients is especially important for detection and appropriate treatment of the diabetic changes in the retina.

As a late diabetic complication, a condition known as **rubeosis iridis**, a reddish discoloration in the colored part of the eye (iris) due to the growth of abnormal vessels may be seen. This condition may progress to neovascular glaucoma, where these new vessels block the angles of the eye and cause an increase in the eye pressure. The vessels may also bleed into the eye.

# Lens

The lens in the eye undergoes (i) the formation of cataracts and (ii) alterations to its curvature and refractive index of the lens which result in power changes in the eye. Cataract – the clouding of the lens, may manifest with symptoms of glare and increased light sensitivity. Senile cataract which occurs in young Type 2 (non insulin dependent) diabetic individuals is more prevalent and occurs more advanced in one eye and matures slowly. However, True diabetic cataract that occurs in Type 1 (insulin dependent) diabetes in both the eyes (bilateral), consist of bands of white subcapsular dots and fine needle shaped opacities. It is also known as snowflake cataract due to its appearance, however it rarely affects vision.

Fluctuating myopia (near sightedness) can be a presenting sign in diabetes. High blood sugar causes the lens to swell and change its refractive power leading to blurring of sight. Hence testing for new spectacles should not be done until the blood glucose has stabilized.

# Optic nerve abnormalities

Optic neuritis is a condition, where the optic nerve is infected following endogenous or

local infections like sinusitis especially in subjects with diabetes. The symptoms include slowly progressive loss of vision, colours may appear "washed out" with loss of contrast sensitivity, discomfort and pain in and around the eye, often worsened by movement of the eye and there may be swelling of the optic disc. Vision usually improves in about 85% of patients after a few weeks or even months however, it may not return to normal. In addition to control of diabetes, antibiotics for control of infection and steroid injections may be necessary to help the optic nerve recover.

Optic disc swelling (diabetic papillopathy) is usually seen in Juvenile Type 1 diabetic subjects in 2<sup>4</sup> and 3<sup>4</sup> decade of life. Papillopathy is often bilateral and usually causes no symptoms. Loss of vision in this condition is usually moderate; however, it tends to recover in 6 months.

## Glaucoma

A person with diabetes is nearly twice as likely to get glaucoma compared to non diabetic adults. Glaucoma causes a slow and progressive damage to the optic nerve. which is the connection between the retina and brain. It rarely causes symptoms. Detection and prevention are only possible with routine eye examinations. However, certain types, such as angle closure and congenital, do cause symptoms like sudden decrease of vision, severe eye pain, headache, glare and light sensitivity. Glaucoma is detectable by routine tests like computerized field testing and actual measurement of optic nerve and retinal fibre measurement by Optical Coherence Tomography (OCT).

# <u>Retina</u>

The retinal complications due to diabetes include diabetic retinopathy and retinal vein occlusion. Diabetic retinopathy, affection of the inner layer of the eye (the retina) due to diabetes is today the major cause of visual impairment. It can be basically divided into two types – non-proliferative and





proliferative. One in five diabetic individuals may develop diabetic retinopathy according to the CURES Eye study (17.6%) conducted by us. The two sight threatening forms of diabetic retinopathy are Diabetic Macular Edema (fluid accumulates in the macula) and Proliferative diabetic retinopathy ("New Vessels" formation/bleeding in the retina). As individuals with sight threatening retinopathy may not have any symptoms, life- long dilated retinal screening is a valuable and necessary strategy for early detection of diabetic retinopathy.

Retinal vein occlusion is one of the common retinal vascular diseases responsible for visual loss in diabetic individuals, which can vary from mild or severe. Aretinal vein occlusion is a blockage

of veins in the retina that drain blood out of the retina, back to the heart. Patient may complain of sudden painless loss of vision and may complain of a sudden onset of floating spots or flashing lights.

Thus, as eye complications in diabetes affecting all structures of the eye, routine, yearly, expert clinical examination is mandatory for the fundamental ophthalmic care of the patient with diabetes. In addition, timely treatment (laser photocoagulation) and good control of diabetes, blood pressure and lipid levels are essential.

Dr. M. Rema Managing Director, DMDSC



Testimony ... Z

# My experience about the centre....

I had never heard about Dr.Mohan's Diabetes Specialities Centre till one of my old office staffs from Coochbehar district of West Bengal, a chronic diabetic patient told me about the result he obtained after visiting the centre and advised me to get my problem checked there. During that particular period I was posted as the Additional District Magistrate in the district of North Dinajpur in West Bengal. In view of my deteriorating health condition due to uncontrolled diabetes all my family members advised me to resign from the service. I had also undergone angioplast in CMC vellore in April 2004. So I thought that it would be appropriate for me to resign from the service but before that I made it a plan to visit the centre once.

It was in the month of May 2005 I along with my wife went to the centre and got the diabetes checked. On seeing my critical condition of the diabetes the diabetologist advised me to get admitted as inpatient and accordingly I got admitted the same day. It is unbelievable that after five days my diabetes came down to normal level and I was released from the hospital. Gradually my condition started improving and I gave up the idea of resigning from the service. My insulin intake was replaced by oral medicine after 9 months and since then my diabetic problem is completely under control. Since May 2005 onwards I have been visiting the centre once in a year for review. In the last visit I took the life membership of the centre. I have full faith in the treatment I receive from the centre and suggest all diabetic patients to visit the centre. I find all the officials and staff of the centre very helpful, co-operative and trustworthy and I expect that this centre would continue to grow as a great service centre in the days to come to help people afflicted with diabetes to ease their problem. I extend my appreciation for satisfactory and trustworthy treatment.

P. Sada, (M.No. 5984) 18/3, TB Monastery Road, PO & DT Darjeeling WB









# Frequently Asked Questions

# 1. I am obese, what could be the cause and its health implications. Can you suggest few strategies to reduce weight?

Ans: Obesity in the developing world is a result of series of changes in diet, physical activity, health and nutrition. The rise in overweight and obesity can be attributed to an imbalance between calories consumed and calories expended. Obesity is strongly associated with and predispose to a number of other co-existing condition including Type 2 diabetes, insulin resistance, hypertension and dyslipidemia which further contribute independently to the development of heart disease. Increasing understanding of the role of essential factors such as those related to diet in weight management can lead to more effective strategies to help to present or reduce overweight or obesity.

# 2. What is a "Portion" and "Serving" in diet?

Ans: A "portion" is the amount of a specific food chosen to be eaten for breakfast, lunch, tea and dinner or other eating occasion.

A "serving" is a unit of measure that generally describes how much of a food one should probably eat at one time and the serving size is the amount listed on the "Nutrition" facts panel on packaged food or the amount recommended in the dietary guidelines.

# 3. What is BMI? How it is calculated and what is the range of BMI for normal Indians?

Ans: BMI is nothing but Body Mass Index. It uses a mathematical formula that accounts for both a person's weight and height. BMI is a reliable indicator of total body fat, which is related to the risk of disease and death. It is calculated using the following formula.

 $BMI = \underbrace{Weight \text{ in } kg}_{\text{Height in } m^2}$ 

The normal range of BMI for Indian adults is 18.0-23.0.

# 4. Why is it important to control diabetes?

Ans: Taking good care of diabetes will make you feel better and can lower your chances of getting: Heart disease, Stroke, Eye disease that can lead to a loss of vision or even blindness, Nerve damage that may cause loss of feeling or pain in the hands, feet, legs or other parts of the body and lead to problems such as lower limb amputation or erectile dysfunction, Kidney failure, Gum disease and loss of teeth.





# 5. What are the special tests done for Diabetic Retinopathy?

Ans: Fundus Fluorescein Angiography (FFA): In this test, a special dye is injected in the arm. Pictures are taken as the dye passes through the blood vessels in retina. The test helps to identify areas of damage and appropriate treatment can be recommended.

Optical Coherence Tomography (OCT): It is a new noncontact, noninvasive imaging technique used to obtain the thickness and profile of different parts of the retina. OCT is identical to ultrasound B-scan imaging except that light rather than sound waves are used in order to obtain a much higher longitudinal resolution. OCT has been used increasingly to evaluate and manage a variety of retinal diseases including diabetic macular edema (fluid collection in the critical central region of the retina, which is called as the "macula"- the "seeing" portion of the eye), macular holes, age-related macular degeneration (ARMD), epiretinal membranes and retinal inflammatory diseases. Early nerve damage and other diseases of the optic nerve can be measured using the OCT technique. This diagnostic test takes approximately five minutes per eye.



Dear Readers, we invite your contributions to 'Diabetes Monitor' in the form of Diabetes related queries, anecdotes or personal

> experiences. Please send / email: Dr. R. Pradeepa M.Sc., Ph.D., Editor, Diabetes Monitor Email: pradeepa@drmohans.com



