Two New branches, M.V. Centre for Diabetes, Mylapore & Perungudi inaugurated in South Chennai

Two new branches of M.V. Hospital for Diabetes named, M.V. Centre for Diabetes were inaugurated at Dr. Radhakrishnan Salai, Mylapore and Burma Colony in Perungudi. This was done by Dr. V. Santha, Chairperson of the Cancer Institute, Adyar, Chennai, at a function organized by M.V. Hospital for Diabetes, Royapuram on 16th June 2012 at Hotel GRT Grand, Chennai.

These centres have all the modern facilities to treat diabetes and its complications.

M.V. Hospital for Diabetes, Royapuram now has 4 branches, 2 in Chennai at Mylapore and Perungudi and 2 in Bengaluru at Koramangala and Banashankari.

The centres have all the modern facilities like, Diabetes education and counseling, Diabetes Heart Evaluation, Dental care, Ophthalmic care, Preventive diabetic foot care (Podiatry), pedicure unit, pain clinic for special problems in diabetic patients like frozen shoulder and state-of-the-art laboratory.
From the Editor’s Desk

Dear Readers,

Greetings from M.V. Hospital for Diabetes and Prof. M Viswanathan Diabetes Research Centre, Royapuram.

There are many interesting topics in this issue on matters that could have an impact on the management of your diabetes.

People with diabetes need to be careful while including carbohydrates in the diet. We conclude the article on the Glycemic Index Diet with some tips on reducing the GI of your diet.

The eyes and teeth are common problem areas for people with diabetes, so recognize the signs before they become acute.

‘Like us’ on Facebook and post your comments so that we can serve you better. Visit our blog site for information on various aspects of diabetes.

I would like to thank Mrs. Sheila Abraham and Mrs. Usha Ganguly for their help in bringing out this issue.

Regards,

Dr. Vijay Viswanathan,
MD, PhD, FRCP (London)
FRCP (Glasgow)
Managing Director
M.V. Hospital for Diabetes (P) Ltd

INSIDE...

Dental Problems — Frequently Asked Questions (FAQ's)

Snippets
• Don't starve to be slim
• 3 Simple Ways to Reduce Stress
• Whole Grains are Healthy

The Glycemic Index Diet – Part 2

News Clips
• Diabetes may originate in the gut
• Sleep disorders up the risk of diabetes
• When diabetes impacts the eye
• BREAKFAST ALARM!
• 20 Benefits of Smiling

Easy-to-prepare recipe
1. **What information do I need to give my dentist about my diabetes?**

Let your dentist know…

- How long you have had diabetes
- If your blood glucose levels are under control
- If there have been any changes in your medical history
- The names of all the medicines you are taking.

2. **How are cavities formed?**

There is always some bacteria in the mouth which release acids from the sugar in the food you have eaten, or from any snack or beverage that has sugars or starches. These acids attack tooth enamel. Repeated attacks can weaken the enamel and may finally result in cavities.

3. **What part does diabetes play in tooth decay?**

Uncontrolled diabetes leads to high glucose levels in the saliva which may be beneficial for bacteria in the plaque (a sticky coating on the teeth). Brushing your teeth twice a day, rinsing your mouth after you eat, and cleaning once a day between your teeth with dental floss, helps remove decay-causing plaque.

4. **What happens if plaque is not removed?**

If plaque is not removed, it can in due course become hard and form tartar. When tartar collects above the gumline, the bristles of the toothbrush cannot reach parts between the teeth. This can create conditions that lead to chronic inflammation and infection in the mouth.

5. **Is there a connection between diabetes and periodontal (gum) disease?**

Periodontal disease—infections of the gum and bone that hold teeth—is often linked to the control of diabetes. Diabetes reduces the body’s resistance to infection and also extends the healing process. It has been observed that patients with poor blood sugar control develop periodontal disease more often and more severely, and they lose more teeth than persons who have good control of their diabetes. That is why good maintenance of blood sugar levels, a well-balanced diet, good oral care at home, regular dental checkups and periodontal examinations are important.
6. **What else can I do to help prevent oral health problems?**

Preventive oral health care, which includes professional cleaning at the dentist’s clinic, is important to control the progression of periodontal disease and other oral health problems. Regular dental checkups and periodontal screenings are important for evaluating overall dental health and for treating dental problems in their initial stages.

7. **What should I do if my mouth frequently feels dry?**

Saliva is needed to moisten the food and helps us to swallow food. It keeps the mouth moist. Bacteria continue to grow if there isn’t sufficient saliva. Xerostomia, or dry mouth, is a common complaint among diabetic dental patients. If the mouth is always dry, it irritates the soft tissues in the mouth, and often makes them inflamed and painful and this increases the risk of tooth decay and periodontal diseases.

Taking frequent sips of water may help relieve a dry mouth. Restricting intake of caffeine and alcohol can also help.

8. **What if I need oral surgery?**

Infection, which is a risk for the diabetic patient, can also make it more difficult to control blood glucose levels. In case of oral surgery, your dentist may prescribe antibiotics to minimize the risk of infection. To help the healing process, keep your blood glucose levels under control before, during and after surgery.

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**3 Simple ways to Reduce Stress…**

- **Tell the truth** – Being honest to oneself reduces tension.
- **Have better self-regard** – Low self-regard creates feelings such as ‘I am being ignored’, ‘people will think I am incompetent or not loyal’, ‘I will be rejected or disliked’… the list is never ending. The worse the perception of self, the more the stress relating to being ignored, humiliated, rejected.
- **Exercise choice** – Failure to understand self-responsibility or choice leads to stress. Understanding where responsibility lies reduces stress.

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**Don’t starve to be SLIM**

You can lose weight by starving – **BUT** that is not a good step. On the other hand, it is very harmful. You will fall sick and you will soon gain the weight you lost.

‘Smart eating’ and ‘physical exercise’ are the key words if you are trying to shed kilos.

Can one lose weight through exercise alone? Yes, but it will take a long time. The best way is to integrate both smart eating and physical exercise.

Set goals for weight loss and eat healthy. Work out 5 days a week. Eat in small quantities at shorter intervals. You will not feel hungry between meals. Avoid snacking outside or eating in front of the computer or TV. Drink a lot of water. Keep some vegetarian snacks or seeds, nuts and fruit around.
‘Glycemic Index is about the quality of carbohydrates, not the quantity’

Shruti Kumari

(Continued from April issue)

Health benefits of low GI eating

Healthy low GI diets…

• Help to fill you up and keep you feeling satisfied for longer — thereby avoiding over-eating or too much snacking.
• Lower your insulin levels — which makes fat easier to burn and less likely to be stored.
• Help you lose body fat and maintain lean muscle tissue.
• Reduce your triglycerides, total and ‘bad’ (LDL) cholesterol.
• Increase your levels of ‘good’ (HDL) cholesterol.
• Reduce your risk of developing Type 2 diabetes.
• Help to manage your blood glucose levels and reduce your risk of developing diabetes complications.
• Reduce your risk of developing cardiovascular disease.
• Reduce your risk of developing certain eye diseases.
• Improve your skin.
• Sustain your energy levels longer, — which improves both mental and physical performance.

Using the GI is easy.

It’s all about balance. To achieve any of the health benefits of low GI eating, you need to make sure that you include plenty of low GI ‘smart’ carbohydrates as part of a healthy balanced diet.

How does one do that?

Step 1. Replace high GI foods with low GI ones from the same food group. The foods you choose should also be low in saturated fat, moderate in sodium (salt) and high in fibre. Foods that meet all of these requirements carry the GI symbol.

Using the GI is easy.
Step 2. Consume at least one serving of a low GI carbohydrate food at each meal and choose low GI carbohydrate foods for your snacks.

Step 3. Regulate the serving size. Be conscious of the quantity of carbohydrates you eat.

ALSO... Make sure you include at least 30 minutes of planned exercise like walking, swimming or riding a bike in your daily routine, plus 30 minutes of incidental exercise like using the stairs instead of the lift or going over to talk to a colleague instead of sending an email.

Some things to keep in mind about the GI

The GI only applies to carbohydrate-rich foods
It is not possible to obtain a GI value for foods which contain almost no carbohydrate. These foods include meats, fish, chicken, eggs, cheese, most nuts, oils, cream, butter and most vegetables.

The GI of a food does not make it good or bad for you.
High GI foods such as most potatoes and wholemeal breads still make valuable nutritional contributions to the diet. Low GI foods such as pastry that are high in saturated fat are no better for you because of their low GI. Different foods have a variety of nutrients. Choose a wide variety of foods that are low in salt and saturated fat, high in fibre and have a low GI.

Don’t avoid all high GI foods
There is no need to eat only low GI foods. While you will benefit from eating low GI carbs at each meal, this doesn’t have to mean excluding all others. A meal that includes a high GI food such as a typical potato and a low GI food such as sweet corn will result in a lower GI overall.

It’s not necessary to add up the GI each day
The GI value of a food can be changed by the way it is processed or cooked, so it is not possible to calculate a precise GI value for recipes or to predict the GI of a menu for the whole day. That is why foods are categorised as low, medium or high GI. Just substitute low GI foods for high GI foods in everyday meals and snacks. This will make it easier for you to plan your diet.

Are foods containing sugar excluded?
Not all sugars are the same. Many foods naturally high in sugars like fruit, milk and yoghurt are very nutritious. It’s more useful to focus on a food’s overall GI and total carbohydrate content rather than on the sugars.

Tips for reducing the GI of your diet…

1. Fill half your dinner plate with vegetables or salad
Try to eat at least five servings of vegetables every day. This doesn’t include the starchy ones like potatoes, sweet potatoes or sweet corn. Choose from three or more different colours of vegetables.

2. Be wise with your potatoes
If you are a big potato eater and can’t bear the thought of giving them up, you don’t have to. Just choose wisely, and be careful with the quantity. Choose one or two medium-sized boiled.

3. Change to more nourishing bread
Instead of high GI white and wholemeal breads, choose a grainy bread where you can actually see the grains, or multi grain bread.

4. Make your starchy staples the low GI ones
Use more of whole grains, such as oats for porridge or muesli and broken wheat and opt for lower GI starchy vegetables.

5. Eat more legumes (pulses)
Include beans, lentils and chickpeas in your meals two or three times a week, more often if you are vegetarian. Use chickpeas, red kidney beans or any other variety of beans or lentils in the form of salad, soup or accompaniments.

6. Develop the art of combining
Combining high GI with low GI foods, results in a moderate overall GI. For example, lentils with rice, rice with beans, tabbouli in pita bread with falafel and a dash
of hummous; baked beans on toast or with jacket-baked potato. This makes meals more interesting too.

7. Have a lean protein source with every meal
Eat lean meat, skinless chicken, fish and seafood, eggs, milk, yoghurt or cheese; or legumes and tofu if you are vegetarian.

8. Tickle your taste buds
Try using vinegar or lemon juice with a dash of extra virgin olive oil with salads; yoghurt with cereal; lemon juice on vegetables or dhals. These foods contain acids, which slow stomach emptying and lower the blood glucose response to carbohydrates in the meal.

9. Use low GI when snacking
Keep foods that are healthy and have low GI in the house. Have fresh fruit, dried fruit, or fruit and nut mix, low fat milk and yoghurt (or soya alternatives), for snacks. Limit the use of high GI refined flour products such as cookies, cakes, pastries, crumpets, crackers, biscuits – whether home baked or bought – regardless of their fat and sugar content.

What is Bulgur wheat?
It is simply WHOLE flour – including the bran, germ and endosperm – made from WHITE wheat. It is milder in flavor than red wheat and is more appealing to people accustomed to the taste of refined flour.

What is whole grain?
Whole grains are the entire seed of a plant. This seed is made up of three parts: the bran, the germ, and the endosperm. The bran is the multi-layered outer skin of the kernel, and contains important antioxidants, B vitamins and fiber.

The germ contains many B vitamins, some protein, minerals, and healthy fats.

The endosperm is the largest portion of the kernel. It contains starchy carbohydrates, proteins and small amounts of vitamins and minerals.

WHAT IS BULGUR WHEAT?

Bulgur wheat is a whole wheat grain that has been cracked and partially pre-cooked. As a whole grain, it is a high-fiber, low-fat, low-calorie vegetarian food ingredient. You can find it in health food stores.
Scientists say that the faulty protein, MT2, may disrupt the link between the circadian rhythm or body clock and the release of the hormone insulin, leading to abnormal control of blood sugar and hence, type 2 diabetes.

‘Blood sugar control is one of the many processes regulated by the body’s biological clock’ Prof. Philippe Froguel, Imperial College, London

Dr. Iain Frame, director of Research at Diabetes UK- “Genetic studies are useful as they can help us understand how a person’s genetic make-up can influence their risk of Type 2 diabetes. In the study researchers examined the MT2 gene in 7,632 people to look for more unusual variants that have a bigger effect on disease risk. They found 40 associated with Type 2 diabetes, 4 of which were very rare and rendered the receptor protein completely incapable of responding to the hormone melatonin. The scientists then confirmed the link with these four mutations in an additional sample of 11,854 people. Each mutation was analysed for its effect on the MT2 receptor in human cells in the lab. The mutations that completely prevented the receptor from working proved to have a very big effect on diabetes risk.

“This risk is not controlled by one single gene, however, and we already know that other genetic changes as well as life style factors can affect the likelihood of developing this complex condition”- Dr. Frame.

‘The more we understand about the effect of these genetic differences, the more likely it is that we will be able to design new drugs or apply existing drug treatments for people with type 2 diabetes, but we are not at that stage still. What we can be sure of is that eating a balanced diet, maintaining a healthy weight and exercising can help to reduce the risk of developing T2DM as well as help people with the condition manage it more effectively and lower the likelihood of developing serious complications.’– Dr. Frame.

– TOI, 18th Feb 2012
Crusade Against Diabetes

July 2012

Diabetes is one of the leading causes of blindness.

“Laughter is the best medicine, unless you're diabetic, then insulin comes pretty high on the list.”

Jasper Carrott

Diabetic eye disease mainly includes diabetic retinopathy and cataract. They can lead to reversible or irreversible loss of vision.

The longer you have diabetes, the greater is the chance of developing eye disease.

Progression is rapid in cases of uncontrolled blood glucose. High blood pressure, increased blood lipids, renal disease, pregnancy, anemia and smoking make it faster.

**Diabetic Retinopathy**

The retina is the back portion of the eye. The retina along with the optic nerve connects the eye to the brain. High blood sugar damages the cells lining the walls of the arteries and the veins of the retina. Fluid, fat and blood can leak from these damaged blood vessels into surrounding tissues and cause thickening of the retina. When it affects the central part of the retina, it results in a drop in vision.

Blood supplies oxygen to the tissues. When the blood vessels to the retina are damaged, oxygen supply is disturbed. New blood vessels start growing to compensate for this loss. The new vessels grow into the jelly-like fluid of the eye. These new vessels are very fragile and can cause bleeding inside the eye. Scar tissue can also result in detachment of the retina in the advanced stage.

**Cataract**

The lens helps focusing light rays to get clear vision. When it gets opacified, it results in a cataract. Timely treatment helps prevent further vision loss. Sometimes, in uncontrolled diabetes, high blood sugar causes swelling of the lens which in turn results in a temporary blurring of vision. Vision will improve with good management of blood sugar levels.

**When to consult an ophthalmologist**

Don't wait for symptoms. If you are diabetic get a detailed examination done. A yearly follow up is mandatory.

If you already have diabetic retinopathy, follow up according to your doctor’s advice.

Patients who have had laser treatment should follow up every 3 months.

If you are pregnant and have diabetes, you are at risk of developing diabetic retinopathy. Get an opinion from an ophthalmologist in the first trimester.

Diabetic retinopathy patients with hyper tension or renal disease should have a regular check up every 6 months.
DIABETES may originate in the gut

New findings promise radical approach to controlling blood sugar.

Scientists have traditionally focused on the pancreas (the source of insulin) and the liver (the storehouse of sugar) for the underlying cause of diabetes. But tests on mice show that the problem may begin in the intestines.

A team at Washington University School of Medicine says its research has shown that problems controlling blood sugar may begin in the intestines. In their research, scientists analysed mice that are unable to make Fatty Acid Synthase (FAS) in the intestine.

FAS, which is a crucial enzyme for the production of lipids, is regulated by insulin and those with diabetes have defects in FAS. Mice without the enzyme in the intestine develop chronic inflammation in the gut, a powerful predictor of diabetes.

‘When people become resistant to insulin, as happens when they gain weight, FAS doesn't work properly which causes inflammation that in turn can lead to diabetes.’ – Clay Semenkovich, lead author

Mice with defects in their ability to make the enzyme FAS in their intestines develop inflammation and diabetes, say the scientists.

– The Times of India, February 17, 2012

Breakfast Alarm!

Studies suggest that children who eat breakfast that are high in sugar have more problems at school. They become more frustrated and have a harder time working independently than kids who eat lower-sugar breakfasts. By lunchtime they have less energy, are hungrier, show attention deficits and make more mistakes on their work.

Research into sugar content of popular cereals by the Environmental Working Group, a non-profit organization, shows that most common cereals contain high levels of sugar.

It's better to choose...

1. Cereals with a short ingredient list (added vitamins and minerals are okay).

2. Cereals high in fiber.

3. Cereals with little or no added sugars (added sugars are ingredients such as honey, molasses, fruit juice concentrate, brown sugar, corn sweetener, sucrose, lactose, glucose, high-fructose corn syrup and malt syrup).

Among the best simple-to-prepare breakfasts for children are fresh fruit and high-fiber, lower-sugar cereals. Better yet, use fruit with homemade oatmeal.

– The Hindu, February 19, 2012
20 Benefits of SMILING

Here are the many social, physical and mental benefits that something as simple as a smile can do!

A smile can…
1. Start your day pleasantly.
2. Make others understand you are in a good mood.
3. Promote positivity in a work environment.
4. Relax your face muscles.
5. Make others put a smile on their face.
6. Tell people that they are going to be okay.
7. Make you look much prettier or more handsome.
8. Reduce all the stress you may have.
9. Help your immune system work better.
10. Lower your blood pressure.
11. Give you a child-like innocence.
12. Release serotonin, natural pain killers and endorphins thus making it a happy drug.
14. Fill you up with positivity and power.
15. Show your understanding side.
16. Convey to others that you can be polite in the hardest of times.
18. Make you appreciate the little things in life.
19. Make you look at the brighter side of a bad situation.
20. Spread to all those around you.

A smile has more wonderful benefits that you could ever think about.

Try this easy-to-prepare RECIPE

Recipe: Delicious Salad

TABBOULEH

Ingredients

- 1 cup bulgur
- 1 2/3 cups boiling water
- 1/3 cup olive oil
- 1/3 cup lemon juice
- 1 cup chopped green onions
- 1 cup chopped fresh coriander
- 1/4 cup chopped fresh mint
- 3 tomatoes, chopped
- 1 cucumber - peeled, seeded and chopped
- 1 teaspoon salt
- Ground black pepper to taste

Method

1. Soak bulgar in boiling water for an hour.
2. Add oil, lemon juice, onions, parsley, mint, tomatoes, and cucumber; toss to combine.
3. Season with salt and black pepper.
4. Cover, and refrigerate for at least 1 hour.

Nutritive value per serving

Calories: 162  Total Fat: 9.5g  Cholesterol: 0mg
Changing Diabetes in Children

The International Diabetes Federation estimates that almost half a million children worldwide (480,000) now have type 1 diabetes. Of these, more than 1.12 Lakh children are in India. There is evidence that many children die shortly after diagnosis and those who eventually survive are poorly controlled and have a poor quality of life. On the contrary, there is significant evidence that children with type 1 diabetes when properly treated can live long and healthy lives.

The Changing Diabetes in Children in India (CDiC) Program is an international program for children with type 1 diabetes launched by Novo Nordisk Education Foundation (NNEF) and is part of Novo Nordisk's strategy for access to care, and builds on four priorities within the right to health – availability, accessibility, affordability and quality of healthcare. The program aims to address various challenges faced by children with Type 1 diabetes in a targeted and coordinated way, to improve their quality of life significantly.

This program aims to reach over 4000 children from economically underprivileged families with type 1 diabetes up to the age of 18 years until December 2014.

Key components and benefits to the children, parents & HCPs through this program

Every child enrolled in this program will get,

- Free insulin
- Free syringes
- Free glucose meter and strips
- Free laboratory tests
- Psychosocial support
- Diabetes education

If you come across any child with diabetes satisfying the below criteria

- Less than 18 years of age and
- From the economically underprivileged (poor) class

Please write to CDICINDIA@novonordisk.com and we can refer them to any of the CDiC center nearest to where the patient is located.

Sri V. Ramaswamy, the senior most diabetic patient in M.V. Hospital, who is 99 years old receiving the senior citizen 80 plus outpatient diabetic privilege card from Dr. V. Santha, Chairperson, The Cancer Institute, Chennai, Dr. Vijay Viswanathan, Managing Director and Dr. Neeraj Bedi, Medical Superintendent are also seen.

List of New Life Members

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