

# LIVE WELL WITH DIABETES

# Sweet Life

May – August 2018



(AN INITIATIVE OF MV HOSPITAL FOR DIABETES (PVT) LTD., ROYAPURAM, CHENNAI, INDIA)



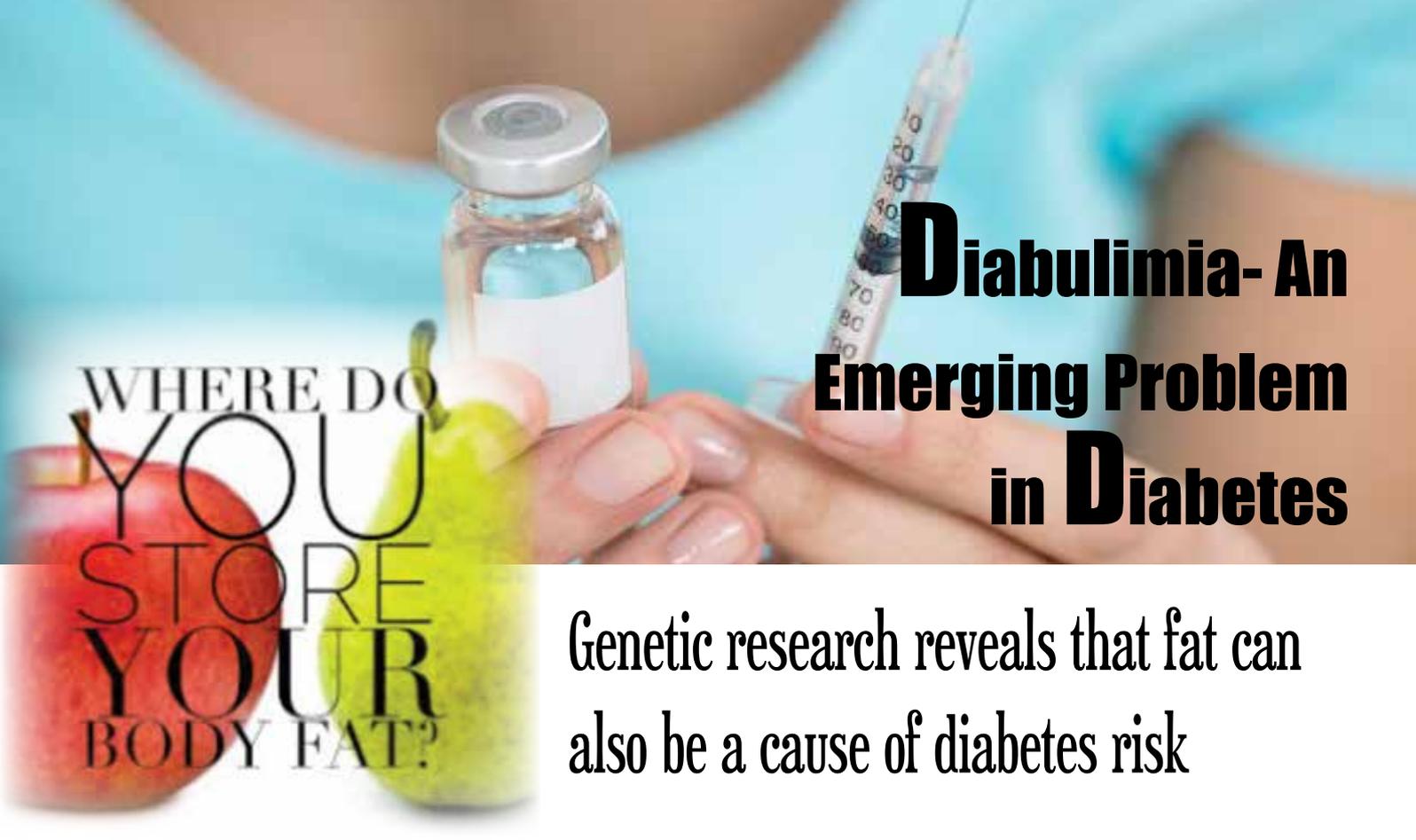
## Abnormal **THYROID FUNCTION**

has a negative effect on blood glucose in diabetes



## **Diabulimia- An Emerging Problem in Diabetes**

Genetic research reveals that fat can also be a cause of diabetes risk



WHERE DO  
**YOU**  
STORE  
**YOUR**  
BODY FAT?

## What's the new Research published from Prof M Viswanathan Diabetes Research Centre, Royapuram ?

### 1. Gender Difference among T2DM patients with diabetic nephropathy

*Dr. Anitha Rani and Dr. Vijay Viswanathan*

The study aimed to determine gender difference among T2DM patients with Diabetic nephropathy. It was found that the prevalence of diabetic nephropathy tends to be higher among women with diabetes however the severity of the disease was greater in men, which could be attributed to imbalance in hormones associated with diabetes.

*TAPI Journal Vol 9, Issue 3 – Dec 2017*

### 2. Latest Management in Diabetic Foot- An Indian Perspective

*Dr. Vijay Viswanathan, Dr. Anitha Rani A*

Preventing peripheral neuropathy by tight glycaemic control is the most effective primary prevention for diabetic foot ulcer and infection as well as for preventing progression to amputation.

In the Indian context, a multidisciplinary and holistic approach is necessary to manage diabetic foot conditions. This includes, Diabetes Education on best practices to protect the feet, early diagnosis treatment for PVD and peripheral neuropathy with regular follow up to prevent ulcers, and the use of the latest available techniques to speed up ulcer healing in addition to tight glycaemic control.

*CMJI, pages 32-35*

## Gene Variation increases Diabetes Risk



Genetic research that till now drew attention to the effect of genes on the pancreas and the insulin it produces reveals that fat can also be a cause.

A natural variation of the gene KLF14 causes some women to store fat on their bellies and hips which significantly increases their risk for type 2 diabetes by creating problems using blood sugar.

"This gene is active only in fat tissue and no other tissue when it comes to its effect on type 2 diabetes," And the gene variation has a cascading effect on hundreds of other genes as well that researchers

have not yet fully understood.

Surprisingly this gene does not have the same effect on everyone. It increases the risk of diabetes more in women than in men. Men with the same variation of the gene are at much less risk of diabetes. However, some women are spared, depending on whether they received the gene from their mothers or their fathers.

"If you, by chance, inherit the risk version of this gene from your mother, then you're at higher risk for type 2 diabetes. If you're a woman, then your risk is even higher - 28 percent higher than for a man who inherited the gene from his father."

The discovery suggests that doctors may one day use drugs on the gene variation to reduce diabetes risk.

In the meantime, the old advice for preventing diabetes is still the best one...

You can't change your genetics but you can change your diet and exercise.

*(Source: Eurekalert)*



*Hello!*

I am proud to announce that MVH and Prof MVDRC has been designated as an **IDF Centre of Excellence in Diabetes Care and IDF Centre of Education** by the **International Diabetes Federation in Belgium**, which represents 230 Diabetes

Associations in 170 countries .

Researchers across the world are working hard to find solutions to various aspects of diabetes. You can read about some innovations in this issue.

Body image plays an important role in social acceptance among young adults and conditions such as anorexia and bulimia are on the rise. It is distressing to know that young women and men with diabetes are also cheating on insulin to remain thin disregarding the serious consequences of their actions. This issue highlights the possible long term dangers of not having insulin in prescribed doses.

I would like to close by reminding you that with careful management of diabetes , people can live normal lives. It just takes a little more effort, but I am sure it will be worth it.

*With regards*

*Dr. Vijay Viswanathan,*

MD, PhD, FRCP (London), FRCP (Glasgow)

Head & Chief Diabetologist,

M.V. Hospital for Diabetes (P) Ltd

# WHAT'S INSIDE

## .....FEATURE

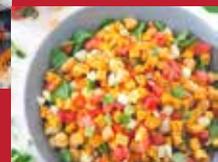
**Diabulimia- An Emerging Problem in Diabetes**

**The Thyroid Gland and Diabetes**

**Gene Variation Increases Diabetes Risk**

## .....FOOD

**Refreshing Vegetable Salad**



Volume - 4 Issue - 2 May - August 2018

### *Editorial Panel:*

**Mrs. Meena Vijay**, Director, MVH

**Dr. Mitalee Barman**, Consultant Diabetologist

**Dr. Vishnupriya Reddy**,

Consultant Diabetologist

*'Sweet Life' is printed and published by Compuprint, No. 9, Aristo Flat, Flat C, Gopalapuram 2nd Street, Chennai 600 086, on behalf of the Prof. M. Viswanathan Diabetes Research Centre & M.V. Hospital for Diabetes (P) Ltd. West Mada Church Rd, Royapuram, Chennai 600013. This magazine provides general information to create awareness about diabetes mellitus, for better management of diabetes and about innovations in diabetes care. Readers are advised to consult with their physicians and dietitians before making any changes to their medications, diet or activities.*

# DIABULIMIA

## An emerging problem in diabetes

Dr. Mitalee Barman  
 Consultant Diabetologist, MV Hospital for Diabetes

*Many Type 1 diabetics, who already have a number of issues to deal with, deliberately give themselves less insulin than they need, or stop taking insulin altogether in an attempt to lose weight, without realizing how much damage they are doing to their bodies.*



Anorexia nervosa and Bulimia nervosa are two common eating disorders associated with attempts to lose weight. To these we can now add Diabulimia - a serious and emerging problem among people with diabetes.

'Diabulimia' is a descriptive term for an observed behaviour. It is not currently recognized as a formal medical diagnosis. However, it is often referred to as 'disturbed eating behaviour' or 'disordered eating behaviour' or 'disordered eating'.

### Anorexia vs Bulimia vs Diabulimia

Anorexic people have an abnormally low body weight and are obsessed with controlling their weight and shape by severely restricting the amount of food they eat, vomiting after eating or misusing laxatives, diuretics or enemas or by exercising excessively.

Bulimia nervosa, is characterized by eating a large amount of food in a short amount of time followed by immediate attempts to get rid of the food consumed by vomiting or taking laxatives. People with bulimia have a fear of gaining weight. Bulimia is frequently associated with other mental disorders such as depression, anxiety, and poor self-esteem.

The word 'diabulimia' is a combination of 'diabetes' and 'bulimia'. It is used to refer to the dangerous and unhealthy practice where insulin-dependent diabetics, especially Type 1, deliberately misuse insulin by decreasing the prescribed dose of insulin, skipping injections, delaying the appropriate dose, or even manipulating the insulin itself to make it inactive only in order to lose weight.

People with diabulimia can also have eating disorders such as anorexia and bulimia or they may only skip or lower their insulin dose and otherwise eat normally.



"Diabulimia, like most eating disorders, begins with low self-esteem. There is a concern about weight, body image and an aim for perfectionism."

This type of disorder usually affects people with Type 1 diabetes. It is more common among females but is also being observed in significant numbers among young males as well. Although not yet officially recognised as a medical condition, diabulimia can be a cause for the rapid development of short and long term diabetes complications.



Without insulin, glucose levels build up in the blood. Hyperglycaemia leads to frequent urination. The calories taken in by eating are passed straight through and out of the body in the urine. As a result, the calories are not used and the body is starved of its source of energy - energy that's needed for every organ to function. Extreme tiredness and dehydration



can result. Muscle loss, bacterial and yeast infections, high cholesterol are also other complications.

If hyperglycaemia remains untreated, it develops into diabetic ketoacidosis (DKA). In the search for energy, the body starts breaking down fat too fast. The liver processes the fat into ketones. High ketone levels cause the blood to become acidic which affects the body systems and leads to other complications. If left untreated, it can lead to death.

The risk of suffering long term complications, such as retinopathy, neuropathy and kidney disease, is greatly increased as consistently high sugar levels damage the blood vessels and nerves. It is not uncommon for teenagers with diabulimia to develop complications when they are in their twenties.

*Some of the warning signs of Diabulimia are:*

- Very rapid weight loss with normal or heavy eating
- High HbA1C

- Physical exhaustion
- Mood changes
- Inability to concentrate and lack of interest in academic and professional performance
- Frequently occurring DKA without any clear reason
- Hesitation in answering questions about diabetes control or injections
- Due to the high blood glucose levels, the signs of hyperglycaemia – thirst, frequent urination, abnormal tiredness in the day and blurred vision- may be present.

Eating disorders are usually treated by focussing on label reading and listening to the body when hungry or full. However, in Type 1 diabetes, Diabulimia needs to be monitored carefully by a team consisting of endocrinologist and psychologist as well as a diabetes educator and dietitian because to use insulin one has to know carbohydrate amounts and there are times when one has to eat whether hungry or not, to manage glucose levels.

**Diabulimia is a condition that is difficult to overcome.**

Ref - *Indian Diabetes Educator Journal* - May 2018  
[www.diabetes.org.uk](http://www.diabetes.org.uk)

## Our Most Recent Addition

## The Advanced Diabetes Care Centre @ MVH, Royapuram

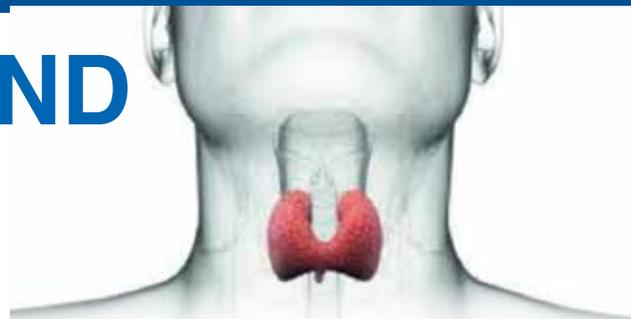
*The new facilities include*

- A Healthy blood vessel clinic
- A blood-less sugar testing clinic
- Nerve clinic
- Pain clinic
- Clinic for children with Diabetes
- Men's wellness clinic
- Women's wellness clinic
- Diashoppe with all Diabetes supplies

These clinics are looked after by experts in that field.



# The **THYROID GLAND** and **DIABETES**



The thyroid gland produces two hormones – Thyroxine T4 and T3 – which play an important role in the metabolism of all organs, regulate glucose production in the liver, control most of the genes concerned with carbohydrate metabolism, and also affect other tissues including white fat tissues and skeletal muscles.

People with diabetes are at greater risk of developing thyroid disorders, and this is more common among females. Abnormal thyroid function has a negative effect on blood glucose in diabetes. It is a well-known fact that people with diabetes who also have hyper-thyroidism have difficulty in managing blood glucose levels and are at greater risk of diabetic ketoacidosis. Hypothyroidism is a common disorder in type 2 diabetes. Post pregnancy thyroiditis is three times more common among women with diabetes. Both hyper- and hypo- thyroidism are associated with insulin resistance which is reported to be the major cause of impaired glucose metabolism in type 2 diabetes. The first indication of development of hypothyroidism in Type 1 diabetes is when hypoglycaemia occurs frequently.

All adults should be tested for thyroid activity from the age of 35 years and reassessed every 5 years with more frequent testing for those at high risk. Thyroid Stimulating Hormone (TSH) screening is recommended in women of child bearing age either before pregnancy or during the first trimester. People with Type 2 diabetes should be screened at the time of diagnosis and after every 5 years.

Iodine is very important for the production of essential hormones by the thyroid gland. It is used and required by our organs, tissues, muscles, and all internal systems. Iodine also converts food into energy. The recommended daily allowance of iodine for an adult is 150 micrograms.

### *Food sources of iodine*

The ocean provides some of the best iodine-rich foods .Seafood

such as varieties of seaweed, cod, shrimp, mackerel and tuna are rich sources of iodine. Poultry, lean meat, whole grains, organic milk and milk products such as yogurt, ice cream, and cheese – especially goat cheese – are also good iodine sources.

Food	Serving Size	Cals	Amount (mcg)	DV (%)	Nutrient Density	World's Healthiest Foods Rating
Yogurt	1 cup	154.3	87.22	58.1	6.8	very good
Milk	1 cup	122.0	58.56	39.0	5.8	very good
Eggs	1 each	77.5	27.00	18.0	4.2	very good
Strawberries	1 cup	46.1	12.96	8.6	3.4	very good
Cheese	1 oz-wt	72.0	10.09	6.7	1.7	good

Organic potatoes are one of the best vegetable sources of iodine. Leave the skin on to get the best iodine benefits. Himalayan crystal salt, iodized salt, cranberries, strawberries, navy beans, almonds, avocados, prunes, eggs, banana, also provide iodine.



# Advances in Diabetes Management

## First Artificial Intelligence Device Approved by US FDA for Diabetic Retinopathy



Diabetic retinopathy, is a common cause of vision loss among people living with diabetes. It occurs when high levels of blood sugar damage the blood vessels of the retina. Detecting it in the early stages is an important part of managing diabetes.

The device, called IDx-DR, is a software programme that uses an artificial intelligence algorithm to analyse images of the eye taken with a retinal camera. It can detect greater than a mild level of the eye disease, diabetic retinopathy, in adults who have diabetes.

A doctor uploads the digital images of the patient's retinas to a Cloud server on which IDx-DR software is installed.

If the images are of sufficient quality, the software provides the doctor with one of two results, either "more than mild diabetic retinopathy detected: refer to an eye care professional" or "negative for more than mild diabetic retinopathy: re-screen in 12 months." If a positive result is detected, patients should get their eyes checked for further diagnostic evaluation and possible treatment as soon as possible.

The FDA, however, has cautioned the use of IDx-DR on pregnant women with diabetes as diabetic retinopathy can progress very rapidly during pregnancy and the device is not intended to evaluate rapidly progressive diabetic retinopathy.



## New Dressing Material to Treat Diabetic Wounds Developed by IIT Madras

Diabetes affects around 70 million Indians and the number is on the rise.

"Wounds in people with diabetes heal slower than in healthy people, with the inflammation or the painful phase taking longer. This delays the formation of blood vessels and the cellular matrix."

The research team used a carbon allotrope and psyllium husk (commonly known as isabgol) that can accelerate wound healing by improving blood vessel formation in both normal individuals and also in people with diabetes thereby resulting in faster wound healing. Currently, the materials that are available for faster wound healing are expensive, costing up to \$2,000 for a 4 to 5 sq-in patch. However, this new dressing material is inexpensive. The research team said that they are hoping to cut down the cost to around ₹1,000. The dressing material covers the open wound and is wrapped over using a normal bandage. It is still being researched.

(Source [www.medindia.net](http://www.medindia.net))

## Food

### Refreshing Vegetable Salad

#### Ingredients

Sweet Potato	Roasted with skin and cubed	½ cup
Carrot	Chopped and steamed	¼ cup
Beans	Chopped & steamed	¼ cup
Toasted walnuts	Optional	½ tsp

#### For Dressing

Hung curd	low fat	¼ cup
Garlic green chilli paste		1/8 tsp
Salt, pepper, cumin powder		to taste

To make the dressing, mix all the ingredients together and refrigerate till use.

Mix the vegetables, cover and chill for 10 minutes and toss with the cold dressing.

Garnish with toasted walnuts (or finely sliced onion)

Serve in lettuce cups.



**M.V. HOSPITAL FOR DIABETES ROYAPURAM**  
No. 1, 205, 205A/1, 205B/1, 205C/1, 205D/1, 205E/1, 205F/1, 205G/1, 205H/1, 205I/1, 205J/1, 205K/1, 205L/1, 205M/1, 205N/1, 205O/1, 205P/1, 205Q/1, 205R/1, 205S/1, 205T/1, 205U/1, 205V/1, 205W/1, 205X/1, 205Y/1, 205Z/1

*Saving the legs of people with Diabetes*

**Dr. Vijay Viswanathan**  
MD, PhD, FRCP (London & Glasgow)  
Head & Chief Diabetologist

- We specialise in preventing lower limb Amputation
- We Offer the following Amputation Prevention Package to protect the feet of people with Diabetes.
- This investigation should ideally be done once a Year
- Please contact Foot care Department.

**AMPUTATION PREVENTION PACKAGE**

Highlights

INVESTIGATIONS	• Test for blood circulation • Test for loss of sensation • Test for early Paresthesia
INVESTIGATIONS	• Test for loss of temperature • Test for Foot Pressure
ADVICE	• Podiatry • Foot care education & advice
FREE	• Free Diabetic socks
FREE	• Free Footcare Kit
FREE	• Free book on footcare
FREE	• One free foot check up after 3 months in patients with High Risk Foot

The Foot Clinic, the specialist  
of diabetes of diabetes  
[www.mvdiabetes.com](http://www.mvdiabetes.com)

**M.V. HOSPITAL FOR DIABETES ROYAPURAM**

**Avail our ANNUAL DIABETES PACKAGE @ RS 5999/- only which costs Rs 12000/-**

Which consists of 4 OP visits

Further as a special offer, the **CONSULTATION FEES WITH DIABETOLOGISTS IS 50% ONLY FOR LAST 2 VISITS**

Avail this offer which is pocket friendly and stay healthy.

**Visit [www.mvdiabetes.com](http://www.mvdiabetes.com) for more information on packages**

M.V.Hospital for Diabetes, Royapuram has been treating people with Diabetes mellitus and conducting research in diabetes for over 60 years. It is also a teaching institute. It has branches at

**Chennai** : Sreela Terrace, 105, First Main Road, Gandhi Nagar, Adyar, Chennai 600 020. Ph: 044-24425213/14  
Email: [adyar@mvdiabetes.com](mailto:adyar@mvdiabetes.com)

Veejay Towers, Plot No. 14, 1st Floor, Vijaya Nagar Officers Colony, 100 Feet Bypass Road, Velachery, Chennai 600 042.  
Ph: 044-22592209, 42067555, 9345184574

**Bengaluru** : 365, Sulochana Building, I Floor, 3rd Block, Sarjapura Road, Koramangala, Bengaluru 560 034,  
Ph: 080-41513333, 41468686