

LIVE WELL WITH DIABETES



Sweet Life

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SEPTEMBER–DECEMBER 2022

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




WORLD DIABETES DAY

2021-2023
'Education to
protect
tomorrow'



**It's time to get back
on schedule!**
**Are you able to sleep
as you did before the
pandemic?**

Don't allow 
pre diabetes
to progress
to diabetes





Hello!

I am pleased to announce that Sweet Life is back again after a brief pause, with information that offers a perspective of diabetes and its appropriate management.

In recent times there have been many news items especially of various foods and diets that can bring sugar levels to normal limits in people with Type 2 diabetes. However, I would like to caution you not to make drastic changes in your medication and diet without first consulting your physician and dietitian. Adults with pre diabetic levels of blood sugar should try not to allow it to progress into the clinical stage. Those who have progressed to diabetes should try not to develop complications.

This does not imply that people with diabetes cannot eat tasty food. On the contrary, there are many appetizing preparations available using different types of vegetables and fruits, nuts and seeds, grains and legumes that will provide variety in the diet and also be safe for people with diabetes.

However, one has to eat in moderation and follow recommended cooking practices.

The Department of Nutrition at MVH has compiled a list of recipe books especially for people with diabetes.

Please contact the following for more information

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EFFICIENT DIABETES MANAGEMENT



Quality Sleep

Hydration



Regular Blood Glucose Checks



Relaxation Techniques



Appropriate Diet



Medication



150 Minutes of Moderate Exercise Weekly



Consistent Mealtimes



Editorial Panel:

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What's the new research published from Prof. MV Diabetes Research Centre, Royapuram?

Regular hospital visits and treatment outcomes among people living with Type 1 Diabetes mellitus - A 7-year study from South India

Arutselvi Devarajan, Satyavani Kumpatla, Vijay Viswanathan

The study explored the profile, regularity of hospital visits, practice of regular self-monitoring of blood glucose (SMBG) and treatment outcomes of people with Type 1 diabetes. It was observed that those with a minimum of one or more than one hospital visit annually recorded nil or fewer complications compared to those who either did not visit the hospital or were very irregular. Chronic kidney disease and diabetic retinopathy were significantly higher among the irregular visitors when compared to those who were regular. Those who practiced SMBG regularly had fewer complications than those who were not regular with SMBG.

(IJDDC)



Cost of treatment in private facilities for low resource urban community in South India.

Anu Maria Jacob, Arutselvi Devarajan, Sukanya Nachimuthu, Manjula Datta, Vijay Viswanathan.

The study aimed to estimate the direct and indirect cost of treating diabetes among people living in low resource urban setting. About 73% of them earned a monthly income of less than INR 10,000. It was observed that people living with diabetes in low urban setting spent more on direct medical cost. 60% of total medical cost was for purchase of medicines followed by lab investigations (18%) and consultation fee (7.4%) per OP visit.

From The Department of Dietetics and Nutrition, MV Hospital for Diabetes – A nutritious soup recipe

Mixed Vegetable Pulse Macaroni soup

Ingredients :

- | | |
|-----------------------------|---------------------------|
| Macaroni – 1/4 cup | Oil-2 tsps |
| Garlic -1/4 tsps | Carrot (chopped) – 3 tsps |
| Peas – 3 tsps | Capsicum – 3 tsp |
| Onion (chopped) – 3 tsp | Tomato (chopped)– 2 tsp |
| Salt to taste | 1 ½ cups water |
| Black pepper powder – ¼ tsp | |

Method:

Take precautions to avoid the virus

Add macaroni to 3 cups of boiling water in a pan. When cooked, strain the macaroni and then hold it under running cold water for a few seconds. Set aside.

Heat 2 tbsps of oil in a vessel. Add garlic and sauté for a minute. Add onion and sauté for about 2 minutes. Add tomato next and sauté for 2 minutes.

Add all the chopped vegetables- carrot, beans, peas, & capsicum. Add 3 cups of water. Bring it to a boil and then simmer till the vegetables are cooked.

Stir in the cooked macaroni and simmer for two minutes. Add salt and powdered black pepper. Serve hot, garnished with coriander leaves.

Nutritive value per serving Calories:41kcal, Carbohydrates:15g, Protein:0.75g, Fat:1.04g



Don't Allow Pre-Diabetes to Progress to Diabetes

Optimum blood glucose level (80mg/dl) can be equated to a teaspoon of sugar in all the blood in one's body!

The average Indian diet is high in carbohydrates - rice or wheat, high carb vegetables and sweets at mealtimes and fried snacks and sweet beverages between meals. This, when combined with a sedentary lifestyle is a major factor that increases blood glucose levels to 100mg/dl to 125 mg/dl in most adults by 40 years of age or even earlier. This is the pre- diabetic state, which 90% of people are not aware of having.

You can reverse this condition

- Eat healthier food
- Be active and exercise to lose extra weight
- Reduce stress and sleep well
- Stop smoking and avoid too much alcohol
- Drink plenty of liquids and remain hydrated
- Take advice about your diet from a certified dietitian

You have 2 to 6 years after diagnosis to reverse pre diabetes but as stated earlier, a large majority of people are not aware of the condition. To begin with, adults should make it a point to check blood sugar levels regularly. Then the issue can be tackled in the early stages.

When the body has to handle high amounts of carbs in the diet, it is forced to produce greater amounts of insulin to transport the glucose to various cells in the body to be stored as fat, glycogen or used for activities. The body cannot tolerate too much insulin or too much sugar and over a period of time it blocks insulin. This is called insulin resistance and 99% of people do not know they have insulin resistance.



Over the years, the insulin producing cells in the pancreas wear out and cannot function effectively. Then insulin decreases and blood sugar increases to 126mg/dl or higher and prediabetes has progressed to diabetes.

Look out for these symptoms of Insulin resistance

- A waistline over 40 inches in men and 35 inches in women
- Blood pressure readings of 130/80 or higher
- A fasting glucose level over 100 mg/dL
- A fasting triglyceride level over 150 mg/dL
- HDL cholesterol level under 40 mg/dL in men and 50 mg/dL in women
- Tiredness after lunch
- A need to nap after lunch
- Frequently passing urine during the day and at night
- Forgetfulness
- Constant hunger



- Craving for carb foods
- Tingling or burning sensation in hands and feet





Insulin sensitivity can be increased or improved. Insulin resistance can be managed or even reversed through healthy diet and exercise.

A healthy diet that includes healthy fats, fibre and lean protein prevents spikes in blood glucose levels. Complex carbohydrates such as steel cut oats, quinoa, whole grain breads, millets etc. take longer to digest. A Mediterranean diet contains high fibre and protein, and low carbohydrates. Omega 3 fatty acids in fish such as salmon, sardines, tuna and other fatty fish reduce inflammation that causes insulin resistance. Heart healthy monounsaturated fats such as virgin olive oil improve insulin sensitivity. Vegetables which are rich in fibre and low carbs; nuts and seeds that are high in fibre and healthy fats have low GI index and slow the release of glucose into blood stream after a meal.

Avoid sweets such as cookies, cakes, pastries, fried foods as well as other high GI foods like water melon, pineapple, cornflakes and rice cakes. Refined carbs like polished rice, refined wheat, breads, pastas cause sugar and insulin to rise at a faster rate resulting in blood glucose spikes. Include fewer carbs in your diet and do not snack in between meals.



Exercise is one of the fastest and most effective ways to reverse insulin resistance. Any type of physical activity can make insulin work better

A combination of aerobic activities such as brisk walking, swimming, and cycling, resistance training, and weight training is recommended. A study showed that a single session of moderate intensity exercise could increase glucose uptake by at least 40%. In addition, exercise helps a person to lose weight, and this can reverse insulin resistance, especially in over weight People with diabetes should try 2 or 3 sessions of resistance training a week according to their capability.



IT'S TIME TO GET BACK ON SCHEDULE!

Are you able to sleep as you did before the pandemic?



A recent survey has found that a large section of the population has changed their sleep patterns post pandemic.

They reported conditions such as going to sleep late, or waking up late or sleeping fitfully due to absence of routine, and increased stress and anxiety.

People with diabetes need their sleep.

How the body gets ready for sleep...

Serotonin is a chemical produced in the body that carries messages between nerve cells in the brain and the rest of the body. Melatonin is a hormone produced in the body that makes one sleepy at night. Together they ensure good sleep.

Tryptophan, an amino acid found in protein foods is needed to produce serotonin. It works with enzymes to create melatonin.

Here are some helpful tips...

- Have your dinner at least 2 hours before that.
- Put away your mobile phones and laptops an hour before bedtime.
- Avoid midmorning naps, and
- Exercise moderately during the day.



Get sound sleep...

- Read a book. A study showed that 6 minutes of reading at bedtime can relax you and lower stress levels quite significantly.
- Do deep breathing exercises before bedtime as it

lowers stress and gets the body to a restful stage.

- Meditate before bedtime.
- Listen to calming music or sounds of nature or chants for 10 minutes before sleep time.

What you eat can improve sleep...

- Turkey, chicken, fish, egg are good sources of tryptophan.
- Almonds contain magnesium which is important for sound sleep.
- Complex carbohydrates trigger the release of serotonin.
- Kiwi is a rich source of melatonin and a good snack at night.

Avoid foods such as caffeine, alcohol, heavy spicy and fatty foods, acidic foods and sugar as well as too much water at bedtime.

Some combinations of food that can help promote sleep

➤ **Spinach and low fat curd**

Spinach has a high magnesium content which relaxes the nerves and muscles, calms the body and promotes sleep. When combined with dairy products, calcium in milk helps the brain to use tryptophan to make melatonin.

➤ **Kidney Beans and whole wheat and flax seed chapati**

Kidney beans contain vital sleep vitamins B6 and B12 and folic acid. Whole wheat with a few teaspoons of flax seed powder contains omega 3 fatty acids that promote sound sleep. Complex carbohydrate in wheat triggers the release of serotonin.

➤ **Cauliflower and whole wheat chapati**

Cauliflower is a natural source of tryptophan, while whole wheat contains tryptophan boosters.



A 15 MINUTE WALK AFTER A MEAL IS GOOD FOR DIGESTION – IS AN OFTEN QUOTED EXPRESSION



However, recent research shows that even a short walk of 2 to 5 minutes after a meal effectively impacts blood sugar levels. Blood sugar rises and falls more gradually. This is important for people with diabetes who need to avoid sharp spikes in blood glucose levels to manage diabetes.

A walk within 60 to 90 minutes has the best results as that is when blood glucose spikes.

At home, instead of lying down after a meal, move the body, do housework, or some short activity.

At the work place, a brisk walk around the office is good.

For those working from home, take a short walk around the house in

between zoom calls or after lunch.

WHAT YOU EAT AND WHEN YOU EAT GO HAND IN HAND

Research suggests that the body works well when our eating patterns match our circadian rhythm.

The human body follows a daily rhythm – the circadian rhythm or the 24-hour body clock which tells it when to wake up, when to eat, and when to fall asleep.

Each organ has its own internal clock that governs its daily cycle. For example, during the day, the pancreas increases its production of insulin and slows it down at night. Rhythms exist because every organ in the body needs time to repair and get ready to start again the next day. Studies show that always interfering with this rhythm by eating late meals, nibbling at snacks, and other unhealthy eating habits, result in weight gain and metabolic trouble.

Stop for a moment and analyse your own eating habits. If they are disciplined, then you are doing well.

However, researchers report that the average person's eating pattern stretches to 15 hours or longer each day.

Eating at the wrong time of day places a heavy burden on the digestive organs as they are compelled to work at a time when they should be resting. This can increase the risk of disease. People working in shifts mostly eat and sleep at odd times. Night time shift work is linked to obesity and diabetes among other conditions.

Eating a major part of our food earlier in the day is better for health. Blood glucose control is better in the morning than in the evening. The process of digestion of food and burning of calories is far more efficient in daytime. Regular practice of eating late meals upsets the natural rhythm of the body as it signals the rest of the body that it is still day time.

However, if meal times are beyond one's control, do not skip dinner. Make it a light one instead.

What we eat or don't eat certainly affects our health, but modern research shows that when we eat is as important as what we eat.



Chennai: M. V. Hospital for Diabetes Royapuram Chennai announced that they were awarded the Second Prize at the 18th European Diabetic Foot Study Group (DFSG) meeting in Bratislava, Slovakia held on September 16-18, 2022. The DFSG which is the largest meeting of Diabetic Foot in Europe saw the participation of Diabetic Foot Experts from all over Europe. On the occasion, M. V. Hospital for Diabetes and Prof. M. Viswanathan Diabetes Research Centre, Royapuram Chennai presented a research paper on 'Improving blood flow and saving the legs of people with Diabetes'.

Dr. G. Senthil, Consultant Diabetic Foot Surgeon at the M. V. Hospital for Diabetes Royapuram said, "In many people with Diabetic Foot Infection the pulsations in the feet are not palpable which shows they have PAD. Such people have a high risk of major amputation. By doing an Angioplasty, it is possible to save the legs of such people and they need the removal of the gangrene toes [Minor amputation] and we can prevent a major amputation if the infection is not severe."

► September 16 – 18, 2022. MV Hospital for Diabetes and Prof. M Viswanathan Diabetes Research Centre, Royapuram bags the Second Prize for research paper – ‘Improving blood flow and saving the legs of people with diabetes’ at the 18th European Diabetic Foot Study Group meet in Bratislava, Slovakia.



October 27, 2022. Dr. N. Murugan, Consultant Liver Specialist, Chennai was honoured with the Prof. M. Viswanathan Honour Award. He spoke about Non- alcoholic fatty liver disease which occurs in people with Diabetes – a condition that leads to fibrosis and finally, liver failure.

MVH, Royapuram has initiated a simple blood test to detect fibrosis in the liver.

Celebrating World Diabetes Day at MV Hospital for Diabetes, Royapuram

Leonard Thompson received the first successful injection of insulin in January 1922. A hundred years on, insulin still remains beyond the reach of many who need it.

World Diabetes Day(WDD) is a campaign by the International Diabetes Federation to increase access to diabetes care and emphasize the need for more action to prevent diabetes and its complications.

The theme for 2021 – 2023 is ‘**Education to protect tomorrow**’. The focus of 2022 is ‘**Access to Diabetes Care**’. 12th Nov 2022, A programme for children with Type 1 diabetes where they were given free check-up and taught Yoga exercises based on research at MVH on the effect of yoga on diabetes. 13th and 14th Nov 2022, the Garden at Parry’s Corner, the commercial hub of Chennai, was blue lit.



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

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