LIVE WELL WITH DIABETES



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(An initiative of MV Hospital for Diabetes (Pvt) Ltd., Royapuram, Chennai, India)



Vitamin

plays an important role in all kinds of biological processes

WHAT is a balanced DIET?

No single food contains all the essential nutrients you need in the right proportion, so you have to include foods from each of the food groups



Control your Cravings

Stress, anxiety, depression, boredom, loneliness and comfort eating are the emotional triggers of cravings that result in taking in excess calories that leads to unhealthy weight gain.



and Vijay Viswanathan

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



With Type 2 Diabetes

Mellitus: A Traffic Signal Color-Coded Approach

Nikhita Sarathy, Anitha Rani. A., Satyavani, K.

The study was aimed at determining the positive impact of a traffic signal color-coded educational tool to improve HbA1c control and to gauge any gender difference in glycaemic control.

Although a percentage decrease was observed in blood sugar levels, serum Creatinine, eGFR, Total Cholesterol and LDL cholesterol values in both groups, there was a statistical significant difference in HbA1c control only. It was observed that males showed better glycaemic control.

The study highlights the positive impact of the HbA1c thermometer as an educational tool to achieve the Target 7% goal in people with Type 2 Diabetes.



Vijay Viswanathan, Indira Priyadarshini Ramalingam, Nagarajan Ramakrishnan

The aim of this study was to assess the prevalence and severity of OSA and risk factors contributing to it among people with chronic and severe type 2 diabetes.

It was found that OSA leads to increased diabetes complications such as cardiovascular disease, retinopathy and neuropathy. There was a higher prevalence of OSA in Indian patients.

People with diabetes should be screened for this condition to reduce their CVD risk.

Journal of the Association of Physicians of India, Vol. 65, Nov 2017



MVH has published several books on Diabetes for people with diabetes

Please contact the Reception to get a copy. Contact **doctor@mvdiabetes.com** to purchase these books.



Tips on Foot Care



Diabetes & Foot Care



Managing Diabetes with Yoga



Eat Healthy Live Healthy



ஆரோக்கியமான உணவுடன் ஆரோக்கியமாக வாமுங்கள்



Recipes for People with Diabetes



A Comprehence Awarness of Diabetes Care – FAQ



Diabetes and Exercise



Stress Management Handbook





Greetings!

At MVH, people with diabetes are assisted to live their lives in good health and with the minimum complications by keeping a tight control on blood glucose levels and regular check -ups for possible signs of complications.

Continuous high blood glucose levels over a period of time can lead to vision loss, nerve problems, heart attacks, strokes and kidney failure and even loss of lower limbs. The cost of treatment is quite high and if there is a complication, it goes even higher.

As you are aware, The HbA1c test gives doctors the average of your blood sugar level over a period of 3 months. At MVH, it has been noticed that many patients keep a higher margin and so, we insist on a target below 6.5% for most adults. However, we do try to adjust the goal based on individual requirement.

So, I would urge you to continue with the medication, diet and exercise that you have been following to keep your A1c levels on target and get yourselves checked for possible complications.

There are many informative articles for you in this issue which I hope will be useful to you.

With regards

Dr. Vijay Viswanathan,

MD, PhD, FRCP (London), FRCP (Glasgow) Head & Chief Diabetologist, M.V. Hospital for Diabetes (P) Ltd

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WHAT'S INSIDE

FEATURE

Vitamin K for Healthy Bones and Arteries in Diabetes

LIFESTYLE

What is a Balanced diet?

Conquer your Cravings

RECIPE

Creamed Spinach on Toast



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Vitamin



for Healthy Bones and Arteries in Diabetes

Dr. Mitalee Barman Consultant Diabetologist, MV Hospital for Diabetes

Vitamin K is a fat soluble vitamin which is essential for blood clotting. It is found in the form of K1 in leafy greens and other plant sources and, as K2 in animal sources. In its various forms, it plays a crucial role in all kinds of biological processes by activating the calcium binding property of proteins. Vitamin K1 is involved in blood clotting while Vitamin K2 helps to control where calcium ends up in the body. When calcium builds up in arteries around the heart, it is a huge risk factor for heart disease. Vitamin K2 may help prevent heart disease by preventing calcium from being deposited in arteries.

Vitamin K2 helps activate proteins that build and maintain bones and has major benefits for bone health. It may improve dental health.

Vitamin K2 is synthesized by intestinal bacteria but, as it is poorly absorbed from the large intestines, it makes up only a minor fraction of our daily needs. As age increases, the amount of Vitamin K2 made in the intestine decreases. Broad spectrum antibiotics may decrease Vitamin K synthesis. Absorption of Vitamin K2 may decrease with the use of some drugs, mineral oils and fat substitutes.

When should we start Vitamin K?

The earlier the better because it is very difficult to treat osteoporosis once it starts.

What is the recommended daily allowance?

45 mcg daily can help prevent osteoporosis and arterial calcification.

Post- menopausal women need 180 mcg daily.

How long does it take to work?

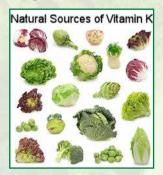
One should see significant effects within 2 years of regular use. There are no side effects when used for a long time.

High doses of calcium supplements (1500 mg) can cause high risk of cardio vascular disease.

Metformin can cause Vitamin B12 deficiency. Vitamin B12 therapy along with Vitamin K2 would be appropriate for those on metformin. Vitamins A and D work together with Vitamin K2. Vitamin K1 is partly converted to K2 in the body. The average modern diet provides very little Vitamin K1.



Vitamin K2 is mostly available from certain animal food sources such as high- fat dairy products from grass fed cows, liver, organs, egg yolks and fermented foods such as those made with bacillus substitutes, sauerkraut, and fermented soya bean. As Vitamin K2 is a fat- soluble vitamin, lean meats and low fat dairy products do not contain much of it.



Leafy vegetables such as kale, spinach, turnip greens, broccoli, lettuce, soyabeans, edamame (soya in pods), pumpkin and blue berries are good sources of Vitamin K1.

(Source: -Expert Opinion - Dr. Dennis A Goodman)



What is a balanced diet

No single food contains all the essential nutrients you need in the right proportion. So you have to consume foods from each of the food groups. Your body needs some carbs in the form of vegetables and fruit and starchy foods for overall health. There are various diet regimen doing the rounds however, here are some guidelines for a healthy diet from two sources.

The American Diabetes Association Guideline for Type 2 Diabetes

1. A larger amount of non- starchy vegetables- spinach, broccoli, carrot, cucumber and peppers.

'He who's stuck with insulin
Is helped the most by discipline

Is helped the most by discipline For many troubles on this earth Can also show us Virtue's worth

Cecil Striker - 1969

Diabetes needs discipline of diet, of lifestyle changes, and conscious living



2. Add a small serving of starchy food-Whole grain bread, parboiled rice, cooked beans, peas, corn, potato



3. Add a small serving of meat or chicken, shrimp, fish, tofu

MyPlate Guidelines

- 1. Fill half your plate with fruit and vegetables.
- 2. Eat whole grain, low-fat paneer, fat free or low fat dairy products.
- 3. Fill a quarter of the plate with starchy foods- rice, whole grains, beans, peas, lentils and the other quarter with meats or poultry.
- 4. Add a glass of fat free milk to the meal.

onquer your ravings

What is the difference between hunger and craving? **HUN-GER** is more physiological



while **CRAVING** is more psychological.

HUNGER - 'I need some food' **CRAVINGS** - 'I want this food'

Stress, anxiety, depression, boredom, loneliness and comfort eating are

the emotional triggers of cravings that result in taking in excess calories



that leads to unhealthy weight gain. However, the good news is that as craving is mostly a state of the mind, it can be blocked by distraction .For example, you can try to resist a junk food craving by getting up and going for a walk.

By eating regularly, especially breakfast, one can avoid cravings, low sugar levels or an empty stomach. A protein rich breakfast should keep cravings at bay.





Feeling lonely or bored? Call up a friend, go for a walk, take up a hobby. Find out the cause of anxiety and stress and overcome it.



Exercise improves insulin function. It helps to improve self -control and reduces sugar craving.



Include flavoured and colourful foods and those with appetizing aroma to a meal to satisfy both psychological and physical hunger.



Focus on food while eating. If you watch TV or read while eating, you will eat more than you need and will not taste what you eat. Eating in



company will make you eat slower and enjoy what you are eating.

Have small quantities of filling nutritious snacks between meals to ward off cravings.

Win against food cravings. Relax, drink plenty of water, keep yourself occupied, shop smart, find substitutions, indulge a little at times.

Sudden food cravings are a message from your body. Listen to them.



CRAVING	YOUR BODY NEEDS	EAT THIS INSTEAD
Chocolate	Magnesium	Nuts, seeds, vegetables and fruit
Sugary Foods	• Chromium	• Broccoli, grapes, cheese, chicken
	PhosphorusSulphurTrytophan	 Chicken, meat, egg, dairy, nuts, vegetables, grains Cabbage, cauliflower Cheese, sweet potato, spinach
Salty Foods	SiliconChloride	Nuts, seedsFatty fish, goat milk



LOW in the middle of the night or as soon as one wakes up?

The liver is not making enough sugar during periods of overnight fasting.

HIGH when one wakes up?

The liver has released too much sugar at night.

OR

There was an episode of hypoglycaemia in the middle of the night and the body is overcompensating.

OR

There is a rise in the level of cortisol early in the morning causing the rise in glucose level.

HIGHER after breakfast?

You have eaten too many carbs.

SLUMPED in the afternoon?

This can happen to those who do not have diabetes or to people with Type 2 diabetes .Also called reactive hypoglycaemia, it can come on due to increased stress hormones, insufficient glucagon-(a situation that increases sugar levels), or some enzyme deficiencies.

AFTER EATING some foods

Sugar-free foods – They have plenty of carbs from starches. Sorbitol and Xylitol might have fewer carbs than sugar but have enough to raise blood glucose levels. Therefore, check out the total carb content on the nutrition label.

Sports drinks - Exercising lowers blood glucose level, blood pressure and cholesterol. However, many sports drinks have a high glycaemic index and can add extra calories and raise blood glucose. People with Type 2 diabetes should avoid them.

Caffeine – in coffee, black or green teas can raise blood glucose levels.



Dr. Mitalee Barman, Consultant Diabetologist, MVH

Dried fruits such as apricots, raisins have higher sugar content than fresh fruit because the natural sugars are in concentrated form.

Fruit juice-Whole fresh fruits are healthy but consuming in the form of fruit juice can cause spikes in sugar level.

Foods such as French fries, potato chips and doughnuts contain a lot of carbs and oil and can raise blood glucose levels.

MEDICATION AND STRESS– Steroids, diuretics, some cold medicines and anti- depressants can raise blood glucose. Birth control pills can affect the way the body handles insulin.

The body releases hormones under stressful conditions that can raise blood glucose levels. Relax with stress busters such as deep breathing and yoga.

Under normal circumstances, the body keeps glucose levels within the normal range of 4-6 m Mols. The pancreas constantly monitors blood glucose levels. The insulin it releases helps body cells to take in glucose to be used as energy. If there is sufficient energy, it signals the liver to take up the glucose and store it in the form of glycogen. When the level is too low, the pancreas releases the hormone glucagon which prompts the liver to release glucose into the blood by breaking down stored glycogen. The glucose enters the bloodstream and raises the blood glucose level.

In the case of continuous low blood glucose levels, do not increase the quantity of food as it can lead to obesity. In both cases of low or high blood glucose levels, check with your diabetes team. They will make adjustments to the diabetes management plan by adjusting medication and diet.





CREAMED SPINACH ON TOAST

A healthy low calorie alternative to toast with butter and cheese.

Ingredients

- 4 slices whole wheat bread, toasted
- 1 ½ cups shredded spinach
- 1/2 tsp low-fat butter
- 1/4 cup finely chopped onions
- Chopped green chillies to taste
- ½ tsp cornflour dissolved in 1/3 cup low-fat milk
- Salt to taste
- 1 tsp grated cheese

Method

- Heat butter in a non-stick pan and sauté onions and green chillies.
- Add the spinach and simmer for a minute.
- Add the cornflour-milk mixture and salt, mix well and stir continuously till thickened.
- Allow to cool.
- Spread the spinach topping on each slice of toast.
 Sprinkle a little cheese on top and grill till cheese spreads.
- Cut each slice into 4 bite sized pieces and serve immediately.



Don't just sit MOVE. Its healthy!

Breaking up prolonged sitting with standing or walking reduces post prandial glucose and insulin in women at high risk of Type 2 Diabetes.

Recommended - 5 minute sessions of walking or standing every 30 minutes.

The effects lasted into the next day.

The reduction in postprandial glucose and insulin concentrations in both healthy and overweight adults suggest important health related metabolic processes occur when individuals shift from sitting to movement.

(Diabetes Care, Vol 39, Jun 2016)

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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