

The Four-Letter Word: D.I.E.T.

How do you avoid the spectre of diabetes in your life and those you love? It all lies in a simple change in the way we eat. Dr Kevin U. Chan, Hyperbaric and Occupational Medicine Pte Ltd, spells it out for you in this special feature on diabetes prevention.

Stop and stare at these alarming numbers.

The countries with the largest number of people with diabetes are, and will be in the year 2025, India, China, and the United States. In developing countries, the majority of people with diabetes are aged more than 65. The pattern will be accentuated by the year 2025.

Consider this, diabetes is found in more women than men, especially in developed countries. In the future, it will be increasingly concentrated in urban areas. Worldwide surveillance of diabetes is a step forward in prevention and control, now recognised as a top priority.

Thirty-five million people in India have diabetes. Possibly another 13 million are undetected. The disquieting fact is that 30 per cent of those with diabetes in the urban population and 50 per cent in the rural population go undetected.

Diabetes can occur at any age. Some people develop diabetes as children or teens. Indians develop diabetes much earlier than their Western counterparts. In Singapore, the ethnicity of a group plays a significant role. Malays had the highest mean body mass index (BMI) after taking into account age, gender, duration of diabetes and exercise status. Compared to Chinese, Indians were more likely to have a positive family history of diabetes. Conclusion: Ethnic differences exist with regard to BMI.

If you are overweight, have a family history of diabetes, previous abnormal glucose screening results, high blood pressure, high cholesterol and a history of cardiovascular disease, the future does not look too bright. If diabetes is not controlled over a period of time, severe health problems may occur — kidney disease that can lead to high blood pressure or kidney failure; eye problems that can lead to blindness; nerve damage and blood vessel damage in the feet that can cause pain, numbness, infection, and possibly the need to remove a toe, foot, or leg; high blood cholesterol levels that can lead to stroke and heart disease; certain infections, such as bladder or kidney infections, vaginal infections, yeast infections and skin infections; problems in pregnancy and thyroid problems. It is Pandora's Box ready to explode.

This nightmare will not kill you instantly. But the process will be an agonising slow death. The best defense against these problems is keeping the blood glucose at a normal level and taking good care of yourself. This often can be done with lifestyle changes, although you may be required to take medications.

Yes, you can prevent it all by keeping a healthy weight, eating healthy, low-fat foods and keeping your blood glucose level close to normal. If glucose cannot be controlled through weight loss, diet, exercise, or oral medication, insulin therapy may be needed.

Over 400 years ago, Hippocrates said: "Just as food causes chronic disease, it can be the most powerful cure."

How do you prevent diabetes? It is a four-letter word: D-I-E-T. While it is an uncommon solution there in the Western Hemisphere

(most doctors are trained to pass out drugs, to try to fix the problem), many people are actually banishing diabetes for good by fixing the problem with food.

Many people get nervous when you talk about dieting and changing the way you eat. It is not true that in order to beat diabetes, lose weight and feel great, you have to eat carrots and broccoli for the rest of your life.

Diet therapy is the basis of such a treatment. The primary dietary consideration for a person with diabetes is that he should be a strict lacto-vegetarian and take a low-caloric, low-fat, alkaline diet of high quality, natural foods. Fruits, nuts and vegetables, wholemeal bread and dairy products form a good diet for those with diabetes.

It is advisable to avoid cooked starchy foods because in the process of cooking, the cellulose enveloping the starch granules will burst. Consequently, the starch will be too easily absorbed into the system. The excess starch absorbed has to be eliminated from the system by the kidneys and appears as sugar in the urine.

With raw starchy foods, however, the saliva and digestive juices in the small intestine regulate the quantities required to be converted into sugar for the body's needs. The unused and undigested portion of raw starchy foods does not become injurious to the system, as it does not readily ferment.

The person with diabetes should not keep away from eating fresh fruits and vegetables, which contain sugar and starch. Fresh



fruits contain sugar (fructose), which does not need insulin for its metabolism and is well tolerated by those with diabetes. Fats and oils should be taken sparingly, for they are apt to lower the tolerance for proteins and starches.

Emphasis must largely be on raw foods as they stimulate and increase insulin production. For protein, homemade cottage cheese, various forms of soured milk and nuts are best.

Here is a simple and easy guide to an effective diet plan:

- Primarily avoid overeating and do take four or five small meals a day rather than three large ones.
- Try having a glass of lukewarm water with freshly squeezed lemon juice at the start of the day; it sure does make a difference.
- Breakfast may include any fresh fruit with the exception of bananas, soaked prunes and a small quantity of wholemeal bread with butter and fresh milk. Now, that's yummy!
- Lunch must comprise steamed or lightly cooked green vegetables such as cauliflower cabbage, tomatoes, spinach, turnip, asparagus and mushrooms. You may also wish to include two or three whole wheat breads according to appetite and a glass of butter-milk or curd.
- One can indulge during the mid-afternoon with a glass of fresh fruit or vegetable juice.
- Follow it up with dinner comprising a large bowl of salad made up of all the raw vegetables in season. The salad may be followed by a hot course if desired and fresh homemade cottage cheese.
- If you want to have a bedtime snack go ahead and have a glass of fresh milk.
- Celery, cucumber, beans, onion and garlic are do-good foods for those with diabetes. Cucumber contains a hormone needed by the cells of the pancreas for producing insulin. Garlic has proven benefits in reducing blood sugar in diabetes. Recent scientific investigations have established that bitter melon is highly beneficial in the treatment of diabetes. It contains an insulin-like element known as plant-insulin, which has been found effective in lowering the blood and urine sugar levels. The diabetes patient should take the juice of three or four bitter melons daily in between meals for positive results.
- It is advisable to try to take less tea, coffee and cocoa because of their adverse influence on the digestive tract. Other foods which you have to try to take less of include white bread, white flour products, sugar, tinned fruits, sweets, chocolates, pastries, pies, puddings, refined cereals and alcoholic drinks.
- The most important nutrient in the treatment of diabetes is manganese, which is vital in the production of natural insulin. It is found in citrus fruits in the outer covering of nuts, grains and in the green leaves of edible plants. Other nutrients of special value are zinc S-complex vitamins and poly-unsaturated fatty acids.



TREATMENT CHART FOR DIABETES

Step 1:

Have bitter melon juice and a glass of lukewarm water with half a freshly squeezed lime the first thing in the morning to cleanse the system of all impurities.

Step 2:

Have a light breakfast comprising any fresh fruit (except bananas), a small quantity of whole meal bread with butter and fresh milk.

Step 3:

Lunch may include a bowl of freshly prepared steamed vegetables, one or two whole-wheat bread with butter and a glass of buttermilk.

Step 4:

Have a glass of juice during the mid-afternoon, preferably one made from fresh fruit or vegetable.

Step 5:

Dinner may comprise a large bowl of raw vegetable salad, with lime juice dressing, sprouted beans and cottage cheese.

Step 6:

Avoid spices, condiments, pickles, alcoholic beverages, tobacco, tea and coffee, meat, over boiled milk, as well as white flour and products made from these, plus refined, processed, stale and tinned foods.

Remember:

- Fresh fruits contain sugar fructose, which does not need insulin for its metabolism and is well tolerated by diabetics.
- Raw foods should be taken liberally as they stimulate and increase insulin production.
- Fats and oils should be taken sparingly.
- Do-good foods for diabetics include: cucumbers, string beans, onion and garlic.

Preventive Measures for Diabetes:

- Brisk walks
- Back lifting exercise (Take it easy & slowly)
- Yogic asanas
- Body massage once a week.

Some sources extracted from: <http://www.sma.org.sg/smj/4504/4504a1.pdf> and the Department of Community Occupational and Family Medicine National University of Singapore, 16 Medical Drive, Singapore 117592