

6 food & health

By Dr TEE E SIONG

# Preventing diabetes

Nutrition Month Malaysia returns this year with the theme 'Eat Right, Move More: Prevent Diabetes from Young!'

IN 2011, the National Health and Morbidity Survey (NHMS) reported that the prevalence of diabetes in people aged 30 years and above had increased by 40% compared to the figure in 2006.

If you thought diabetes was a disease that only affects older adults, you are sadly mistaken. The survey showed that the prevalence was actually increasing across all the ages studied.

What is of particular concern is that the number of individuals who were unaware that they were diabetic had also increased.

This was most apparent among younger adults (below 30 years), where about three-quarters were undiagnosed. So it doesn't matter whether you're young or old, you should stop living in denial and start living a healthy lifestyle, now.

**Belly of the beast**

There are three types of diabetes mellitus, namely type 1 and 2, and the more atypical gestational diabetes.

However, it is known that type 2 diabetes is the most common of the three, accounting for almost 90% of all reported cases.

An unhealthy lifestyle, characterised by physical inactivity and overconsumption of food, are unequivocally established risk factors for type 2 diabetes.

Genetics, age and ethnicity might play a role in the development of type 2 diabetes, but the disease can manifest even if it doesn't run in the family.

When you eat carbohydrate-based foods, they are broken down into simple sugars (mainly glucose) and released into the blood. The pancreas produces insulin (a hormone) to help transport glucose from the blood into cells, to be used as energy.

Diabetes occurs when the pancreas cannot produce insulin or does not manufacture enough of this hormone, or when the insulin produced cannot work properly.

Naturally, the body needs sugar. However, sugar becomes harmful when you consume it excessively – this is true for fats as well.

An unhealthy diet that is high in these components (e.g. sugary beverages and foods, high fat foods) provides you with several hundred calories in just one serving, but lack other essential nutrients. When extra calories are not used by cells, they turn into fat and become deposited in the body, leading to overweight and/or obesity.

Cells in the body are unable to respond to insulin when there is too much body fat; it rejects the glucose-transporting insulin. Eventually, because the glucose has nowhere else to go, it accumulates in the bloodstream and sugar levels skyrocket. If untreated, the situation can lead to diabetes.

Uncontrolled diabetes can be a serious threat to health. Those with diabetes are at greater risk of developing several health complications:

**Heart disease** – Diabetics are two to four times more at risk of heart disease. High blood glucose levels over time can lead to increased deposits of fatty materi-



This year, Nutrition Month Malaysia focuses on the topic of diabetes. – Filepic

als on the insides of blood vessel walls. This may affect blood flow, increasing the chance of clogging and hardening of blood vessels. This situation increases the risk of heart disease.

**Nerve damage** – About 60-70% of diabetics will suffer from some form of neuropathy (i.e. nerve damage). This affects nerves in different parts of the body.

**Kidney damage** – Kidneys help to remove waste from the blood. High levels of sugar makes the kidneys work harder, and over time, this damages the millions of tiny filtering units within each kidney. This eventually leads to kidney failure.

**Eye complications** – The three major eye problems that people with diabetes may develop and should be aware of are retinopathy (damage to the retina), cataracts and glaucoma.

**Fighting diabetes**

It should now be abundantly

clear that we should do all we can to prevent diabetes. To reduce the risk of diabetes, we must pay close attention to four key essential aspects of lifestyle:

**1. Eat BMV (balance, moderation, variety)**

The key in the fight against diabetes is healthy eating. Therefore, you should adopt a diet plan based on the "BMV" approach.

The basics are simple, and you don't even need to give up your favourite foods. Essentially, go for balance, eat in moderation (portion management), and have variety in your meals.

The Malaysian Food Pyramid will help you through this by identifying the different food types you can take in the recommended portions/servings you should have daily.

**2. Keep fit and keep it going**

Being physically active everyday can help you manage your body weight and blood sugar levels better.

If you've been sedentary for too long, don't worry, you can start small (i.e. walk to the store, take the stairs, do some gardening and wash your car).

Gradually, increase your activity level to include a mix of cardiovascular (e.g. brisk walking), strength (e.g. resistance bands) and flexibility (e.g. leg lifts, taichi, yoga, jumping jacks) exercises as well.

Even the smallest effort can go a long way, so don't get too discouraged or quit if you can't finish a full workout.

However, you should know that the Malaysian Dietary Guidelines suggests spending at least 30 minutes a day of moderate intensity exercises, or 60 minutes if you're looking to lose weight.

Remember that it's all about burning away more calories than you actually take in.

**3. Kick the bad habits**

Poor lifestyle habits such as being sedentary, practising poor

dietary habits, smoking, and excessive alcohol intake should be reduced or eliminated altogether.

**4. Mind over matter**

In the immortal words of Kung Fu legend, Bruce Lee, "Defeat is a state of mind. No one is ever defeated until defeat has been accepted as a reality."

So, never give up! Foster a positive attitude towards your efforts and continue to motivate yourself and have your family and friends on board supporting you through this lifestyle transition.

If the change is to be long-term, the mind must be prepared. It's a journey, and like all journeys, the road can sometimes look daunting.

Undertaking these lifestyle changes may be challenging and arduous. However, I assure you these are necessary changes you must make without delay. If you think exercising and eating well is hard, imagine having to cope with the life-long complications (and treatment costs) of diabetes and its co-morbidities.

**Nutrition Month Malaysia 2015 – Let's Prevent Diabetes Fair**

The annual Nutrition Month Malaysia is back for the 14th time with the theme "Eat Right, Move More: Prevent Diabetes from Young!"

This year, Nutrition Month Malaysia will focus on diabetes prevention in both adults and children/families.

To learn more about preventing diabetes and other interesting nutrition facts, head on to the "Let's Prevent Diabetes Fair" at the Paradigm Mall, Kelana Jaya (Upper Atrium, Level UG) on Thursday to Sunday, March 26-29, 2015.

There will be free nutrition screenings for the public, HbA1c checks (for diabetes control) and Anodyne Therapy (for nerve damage) for people with diabetes.

You can also expect expert advice from nutritionists, dietitians and diabetes educators, fun-filled stage activities, prizes and much more.

For more information, call 03-5632 3301, drop by the Nutrition Month Malaysia Facebook page or visit www.nutritionmonthmalaysia.org.my.

**Dr Tee E Siong is president of the Nutrition Society of Malaysia & chairman of the Nutrition Month Malaysia Steering Committee. This article is contributed by Nutrition Month Malaysia (NMM) 2015. NMM is an annual initiative jointly-organised by the Nutrition Society of Malaysia, Malaysian Dietitians' Association and Malaysian Association for the Study of Obesity, supported by Legosan (Malaysia) Sdn Bhd, Malaysia Milk Sdn Bhd, Nestle Products Sdn Bhd, Serba Wangi Sdn Bhd and Yakult (Malaysia) Sdn Bhd.**