



Young with Diabetes

No longer is diabetes an older adults' disease. Now, younger people are being hit — the backlash of our live-it-up modern lifestyles, say worried health professionals. *By Keith G Emuang*

Since young, Mark (not his real name) has always been bigger than most of his peers. He steadily gained weight over his teen years, and by the time he was 18, he weighed a hefty 90kg. Even after he started working, he continued the weight gain. His weight peaked at 120kg three years ago. One day, he started losing weight.

"I thought my diet finally worked! I lost over 10kg in just two months. During a regular medical check-up, my doctor told me the reason — I had diabetes," recalls Mark, now a 30-year-old business executive, who has no family history of the disease.

In another case, an active 17-year-old who had just entered junior college found his health going downhill fast, and he didn't know why. That was Chan Yanhui's nightmare. "I kept losing weight, felt lethargic all the time and was forever falling sick. Only when I went for a full medical check-up did I found out that I had diabetes," recalls Yanhui, now a 23-year-old undergraduate, who also has no family history of the disease.

So young, yet hit by diabetes? It's a rising trend that's worrying health professionals. Drawing attention to the rapid rise of diabetes in Asia, the World Diabetes Foundation recently noted, with alarm, that children and younger people are now suffering from the disease traditionally associated with older people.

"Although there are no published figures in Singapore on the

exact number of youths with diabetes, doctors have noted a trend with younger people, and this is often related to obesity and poor lifestyle," says Assoc Prof Sum Chee Fang, Senior Consultant at Alexandra Hospital's Department of Medicine. "Our modern society and affluence have contributed much to how younger people live today, especially with the easy availability of unhealthy foods and other bad habits."

According to the last National Health Survey carried out in 2004 by the Ministry of Health (MOH), 328,000 people in Singapore aged between 18 and 69 were reported as having diabetes. That's 8.2 per cent of the population, up from 4.7 per cent in 1984.

The World Health Organization estimates that, by 2030, with increased life-expectancy, 695,000 Singaporeans will have diabetes. Currently, MOH figures rank diabetes as the eighth most common cause of death here.

So what is diabetes?

Diabetes mellitus occurs when there is too much sugar in the blood. If the body cannot turn this sugar into energy for the body, it stays in the blood. High blood-sugar levels over a long period causes health problems. It can damage many parts of the body, such as the heart, blood vessels, kidneys and eyes.

For Yanhui, a changed diet, regular exercise and vigilant

monitoring of his condition lets him live life to the fullest. Thanks to an active lifestyle that incorporates long-distance running, he can even indulge in chocolates and sugary foods once in a while.

"The only difference now is my insulin jabs, which I have to self-administer four times a day, pre-meals and before bedtime. It was a little inconvenient at first, but I'm more or less used to them now," says Yanhui, who has Type 1 or insulin-dependent diabetes.

This form of diabetes, formerly known as juvenile-onset diabetes, cannot be prevented. The pancreas reduces or stops production of insulin — the key hormone for regulating blood sugar — so those with Type 1, like Yanhui, have to inject themselves with insulin every day for their whole life. It is most common in children and young people, yet it occurs in only about 5 to 10 per cent of people with diabetes.

Between 90 and 95 per cent of people with diabetes has Type 2, or non-insulin-dependent diabetes, like Mark. In this case, the pancreas can produce insulin but the action of insulin is impaired and blood sugar levels become elevated. Diet, exercise and medication can control Type 2, but if these don't work, insulin may be required.

Some women develop gestational diabetes during pregnancy. Although it usually improves or disappears after the baby is born, it may reappear in later pregnancies. This diabetes, which occurs in 2 to 5 per cent of all pregnancies, can lead to diabetes mellitus.

No warning signs

Although the risk of diabetes increases with age, a large number of people are in the pre-diabetes stage, which is a silent precursor to Type 2 diabetes.

According to the 2004 National Health Survey, 12 per cent of Singaporeans — or one in every eight persons — is affected by pre-diabetes. In this condition, one's blood sugar levels are above normal but not yet high enough to be diagnosed as diabetes.

WHAT YOU CAN DO

Winnie Chui Kui Lin, Nurse Clinician at Alexandra Hospital's Diabetes Centre, offers some key advice on how to ward off or control Type 2 diabetes.

For those without diabetes — Maintain a healthy lifestyle with healthy food choices, regular physical activity or exercise, and a healthy weight and body mass index (BMI). Find the time and opportunity to relax and de-stress.

For those with diabetes — Aside from keeping to a healthy lifestyle as above, diabetics should take their medication regularly in the prescribed dosages recommended by their doctor. It is also important to actively practice self-care management like monitoring of blood sugar at home, keeping home blood-pressure measurement records, and keeping to follow-up appointments to help in early detection and subsequent monitoring of potential diabetes-related complications.

TELL-TALE SIGNS

What are some common symptoms of diabetes?

- D** – Drowsiness, lack of energy
- I** – Itching
- A** – A family history of diabetes
- B** – Blurred vision
- E** – Extreme thirst or frequent urinating
- T** – Tingling, numbness in lower limbs
- E** – Extreme weight loss or gain
- S** – Slow healing of cuts



Dr Stanley Liew Choon Fong, Consultant Endocrinologist at the National University Hospital, elaborates, “Pre-diabetes is a condition in which one’s blood-sugar level is higher than normal, but not high enough to be classified as Type 2 diabetes. It occurs when the body’s cells are not responding ideally to insulin. A person with this condition has eight times the risk of developing diabetes compared to a normal person.”

There are no warning signs for pre-diabetes — one reason why many people remain clueless for years. Not knowing or not changing their lifestyles, high-risk individuals may worsen their condition. Because of this absence of symptoms, people should get their GPs or family doctors to test them for pre-diabetes, especially people who are 40 or older, are overweight, lead a sedentary lifestyle or have a family history of the disease. According to Dr Liew, changing lifestyles, losing weight if one is overweight, adopting a healthy diet and increasing physical activity are ways to prevent people with pre-diabetes from contracting diabetes.

Winnie Chui Kui Lin, Nurse Clinician at Alexandra Hospital’s Diabetes Centre, notes, “We see young people having impaired blood-glucose tolerance, a condition of pre-diabetes. I attribute this to the general trend of an increased sedentary lifestyle, unrestricted food consumption and reduced physical activities among young people.”

Childhood obesity is another high-risk factor for diabetes. And if obese children escape the onset in their youth, it is highly likely that their bad lifestyle habits will continue into adulthood and put them at greater risk. This is one reason health and education authorities here have been aggressively working to stem and turn the prevalence of obesity among children in schools. The Trim & Fit (TAF) programme is one such project that has had notable success.

Real dangers

One deadly consequence of diabetes occurs when the blood

supply is affected and nerves are damaged to the point where a person may lose all feeling in his lower limbs. As a result, any ulcers on the feet can lead to gangrene, which can lead to amputation, says Assoc Prof Sum, who also heads the National Healthcare Group (NHG) Diabetes Disease Management Workgroup. “Besides taking medication, lifestyle changes and regular visits to the doctor for follow-ups and screenings can help keep such serious complications at bay. What’s also important is to learn as much about the condition as possible, so the person becomes empowered with information to best manage his health and lifestyle,” adds Assoc Prof Sum.

The Straits Times reported that in 2005 alone, doctors amputated 500 legs affected with gangrene. In nine out of 10 cases, amputation could have been avoided. To reduce the number of amputations among diabetics, the NHG set up a chain of podiatry centres and foot-screening services in several locations across the island.

Diabetic foot-screening services are available at three hospitals — Alexandra, National University and Tan Tock Seng. Meanwhile, the Singapore Footcare Centre, a separate podiatry arm of NHG, has clinics in Toa Payoh, Bedok and Jurong.

Another consequence of diabetes is diabetic retinopathy, a disorder of the retinal blood vessels which is a major cause of adult blindness in Singapore. In 1998, the Ministry of Health reported that one in three Singaporeans over 65 years of age had diabetes, with some 200,000 suffering from diabetic retinopathy. The longer a person has diabetes, the higher the likelihood of diabetic retinopathy which, if left undetected and untreated, can lead to blindness.

High blood-sugar levels also damages the blood vessels in the brain, heart and kidneys, reducing or cutting off blood supply to these organs. In such cases, a diabetic also has a high risk of suffering from a stroke, heart disease and kidney failure, requiring dialysis.

CELEBRATE THE SEASON — WITH CARE

It’s that time of year again for parties and feasting. However, having diabetes doesn’t mean you can’t enjoy yourself.

Dr Michelle Jong, Consultant at Tan Tock Seng Hospital’s Department of Endocrinology, says that people with diabetes just need to plan sensibly and use judgement and moderation as a

guide. Here is what she advises:

- Most food will be high in calories, fat and refined sugars, so control the portions you take.
- Watch the “extras” added on food such as salt, butter or rich sauces.
- Instead of eating fried foods, opt for roasted or grilled fare.
- Eat more vegetables.
- Try to stick to sugar-free drinks and water.
- Some alcohol is fine but don’t overindulge as this may wreak havoc on your blood-sugar levels.
- Rather than one big meal, pace yourself with small meals throughout the day.

- Avoid skipping meals. You’ll be very hungry by the next meal and may overindulge.
- Have an exercise routine and stick to it. It will help burn off more calories and keep your blood-sugar level in check.
- If attending a meal/party, bring your medication and time your meals. If meals are going to be late, eat something before or adjust your medication routine (discuss with your doctor).
- Check blood-sugar levels regularly.
- Avoid the temptation of “diabetic foods”. These may be low in sugar but are generally high in fat.



CELEBRITIES AND DIABETES

We know her as Storm in the *X-Men* movies and remember her Oscar-winning performance in *Monster's Ball*. Yet, not many know that film star Halle Berry (below) has Type 1 diabetes.

She was diagnosed in 1989, after going into a diabetic coma during the taping of a television sitcom. She was 23 years old then.

Determined not to let the disease have any impact on her ambitions, Berry set about learning to control it while continuing her acting career.

Today, Berry's daily routine entails blood-sugar level tests and several insulin injections. Besides keeping to a strict exercise regime, she is extremely careful with what she eats.

Interestingly, at a Los Angeles benefit event, she told the star-studded audience, "My teacher told me at the age of 10 that when I grew up, I would be given a gift. It turned out to be diabetes. It gave me the strength and toughness I needed for my life."

Berry is still an active volunteer and advocate of diabetes awareness, as well as an inspiration to others with diabetes.



Other celebrities you probably never knew had diabetes include:

- **Bill and John Davidson**, heads of Harley-Davidson Motorcycles

- **Mikhail Gorbachev**, former premier of the former USSR
- **Mick Fleetwood**, drummer in rock band Fleetwood Mac
- **Ray Kroc**, founder of McDonald's
- **Bret Michaels**, lead singer of the rock group Poison
- **Elvis Presley**, singer/actor/legend
- **Anne Rice**, author of *Interview with the Vampire*
- **Sharon Stone**, Hollywood actress
- **Lydia Sum**, Hong Kong actress
- **Andrew Lloyd Webber**, composer of hit musicals like *Cats*
- **Vanessa Williams**, singer and actress. For more celebrities with diabetes, check out www.angelarose.com/famousdiabetics

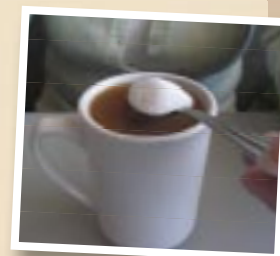
5 DIABETES MYTHS

1 Eating too much sugar causes diabetes

Diabetes is caused by a lack of or absence of insulin or the body's resistance to the action of insulin. There is no clear evidence that intake of sweet foods leads directly to diabetes, but people with diabetes should regulate their intake of sweetened food and drinks.

2 There is a form of diabetes that is not considered serious

Both Type 1 and Type 2 diabetes can potentially lead to complications. Even if you don't require insulin injections or medication, it is vital that the condition is controlled.



3 Exercising will worsen diabetes

It is important that people with diabetes keep active. Moderate exercise helps the body to better use insulin and improves a person's control of the disease. But they should consult a doctor first before starting any exercise regime.

4 No family history, no diabetes

While some are born with a genetic predisposition to develop diabetes, others with the disease don't have a family history of it. Excess weight and lifestyle are also contributing factors.

5 Those with diabetes eat only diabetic foods

People with diabetes don't need special foods. They keep to a healthy and balanced diet of carbohydrates, proteins and fats. Also, the diet should be low in saturated fat and salt, and rich in whole grains, fruit and vegetables.

WHERE TO GET HELP

NHG hospitals and clinics see patients ranging from those newly diagnosed with the disease to those with multiple organ complications. Comprising physicians, nurse educators, dietitians and pharmacists, the centres and clinics take a multi-disciplinary approach in the care and management of people with diabetes.

Besides consultations with physicians, patients receive dietary counselling. Nurse educators also provide information on how to manage diabetes, reinforce the importance of a proper diet and physical activity, and help with lifestyle modifications. Patients who are overweight may also be referred to dietitians and nutritionists to undergo a weight management programme.

Diabetes Centre at Alexandra Hospital
24-hour hotline: 6379-3838

Diabetes Clinic at National University Hospital
Tel: 6772-2002

Diabetes and Endocrine Centre at Tan Tock Seng Hospital
Tel: 6357-7000