

Proper medication, diet and exercise can improve lifestyle

■ By Prof Mustaffa Embong

WHEN Adam was diagnosed with Type 2 diabetes, he was told it was not curable but could be controlled. And if he took care, he could lead a healthy life.

It is a new life of self-control and learning how to adopt a healthy lifestyle to bring down his blood glucose levels. This means eating a moderate and consistent amount of carbohydrates.

To help control blood glucose levels, one has to substitute sugar with a low-calorie sweetener in meals and beverages. One has also to remain physically active as it helps to maintain a healthy body weight.

It is also important to keep tabs on blood glucose levels with a home blood glucose monitoring kit. As a diabetic, you have to ask yourself this question: Have I been leading a healthy lifestyle?

If you have, but your blood glucose levels are still high, your doctor would normally advise you to take hypoglycaemic agents (OHAs) pills to help lower your blood glucose levels.

However, you still need to continue to

Ministry of Health Malaysia

NADI NATIONAL DIABETES INSTITUTE

FIGHT AGAINST DIABETES

SELF-EMPOWERMENT THROUGH EDUCATION

In collaboration with

MALAYSIAN ASSOCIATION OF SUGAR AND OBESITY

MASO ALL FOR LESS

lead a healthy lifestyle to manage your diabetes.

How can medication help?

With diabetes, your body loses its ability to regulate blood glucose levels. It occurs when your body fails to respond to insulin (a hormone produced by the pancreas to help glucose enter body cells). It also happens when your body produces insufficient insulin.

Either way, it will result in high blood glucose levels (hyperglycaemia). Persistent hyperglycaemia would eventually lead to complications such as kidney disease and cardiovascular diseases such as heart attacks. Hence, the main goal in diabetes management is to lower blood glucose levels within the normal range (between 3.8 and 6.1 mmol/L when fasting and below 7.8 mmol/L after food) as closely as possible.

Medication can also help to stimulate the pancreas to produce more insulin or to make body cells more sensitive to the hormone.

Below is a list of a few classes of diabetes medication:

● **Sulfonylureas:** This stimulate the pancreas to release more insulin. Glibenclamide and gliclazide are two examples in

this class.

● **Meglitinides:** This class of drugs stimulates the pancreas to produce more insulin. Compared with sulfonylureas, they are faster acting and last for a shorter duration of time. Hence they can be taken immediately before food to control the blood glucose rise. Repaglinide and nateglinide are drugs in this class.

● **Biguanides:** They lower blood glucose levels by reducing the production of glucose from the liver. Metformin (a drug that belongs in this class) in particular, makes the body cells more sensitive to insulin so that glucose can be absorbed into the cells and metabolised.

● **Thiazolidinedione:** These also make the body cells more sensitive to insulin, especially the muscle and fat cells. They can also help to reduce the production of glucose in the liver. This class of drugs consists of rosiglitazone and pioglitazone.

● **Alpha-glucosidase inhibitors:** Drugs in this class, such as acarbose, block the breaking down of starches, such as rice, bread and noodles into simple sugars such as glucose in the intestines. Their actions result in a slower rise of glucose in the bloodstream after a meal.

It is important to follow your doctor's prescription and adhere to the prescribed times when taking these medications.

How long does a diabetic have to take medication?

As diabetes is a life-long disease, medication may need to be taken over the long term. Complying with your doctor's prescription means doses could actually be decreased once you have made progress. Eventually, you may even stop medication altogether if your dietary management, physical activity and weight management are effective.

Are there any special precautions?

If you are taking medication such as sulfonylureas or meglitinides, make sure you take sufficient amounts of food and not wait too long to eat

after you take the medication.

This is because they can cause blood glucose level to drop too low (hypoglycaemia), causing symptoms such as dizziness, extreme hunger, sweating and, if not promptly addressed, may lead to unconsciousness. It is always prudent to carry sweets with you in case of hypoglycaemia.

Are there any side effects?

You may experience side effects such as rashes, abdominal fullness or diarrhoea. However, it would depend on the type of drug you are taking.

Can I take someone else's medication?

Consult your doctor before taking someone else's medication as your body condition may not be the same. Your doctor would consider factors such as age, body weight, daily routines and presence of other disease such as kidney disease, liver disease or cardiovascular diseases, which would differ from person to person.

If the drugs prescribed are too expensive, your doctor may introduce generic drugs to you. These are drugs whose patent rights have expired and are no longer protected by trademark. A generic drug has the same amount of active ingredient as the brand-name product.

■ **Fight Against Diabetes invites you to take advantage of free diabetes screening which include blood glucose test, body weight, height, body fat and blood pressure measurement followed by counselling today at Sunway Pyramid, Petaling Jaya.**

■ **Fight Against Diabetes is supported by educational grants from Pharmaniaga Berhad, Taj Mahal Rice For Life programme, Equal Sencicare Bureau, OneTouch Centre by Lifescan and 10-20-30 Healthier Weight Programme by Abbott Laboratories. For enquiries, contact (03) 5637 8588.**