

# Prevention of Diabetes and Its Complications

**Diabetes is one of the major health problems in Singapore and the prevalence is expected to increase over the next few decades. There are an estimated 440,000 Singapore residents with diabetes currently and probably many more pre-diabetics who have glucose intolerance.**

**D**iabetes occurs when your pancreas is unable to produce adequate amounts of the hormone insulin, or when your body is unable to respond to the insulin in the right way. This results in a chronic elevation of your blood sugar levels, which is harmful and leads to end organ damage such as kidney failure, blindness, heart disease and limb amputations.

Diabetes is also strongly associated with Metabolic Syndrome, the cluster of inter-related metabolic problems which includes hypertension, high lipid levels and, most importantly, obesity. In fact, obesity is one of the major risk factors in the development of glucose intolerance and diabetes.

## Get yourself screened for Diabetes

Local studies have found that 1 in 3 people with diabetes are undiagnosed, and another 1 in 3 of those being treated for diabetes does not achieve adequate blood sugar control. This shows that many people living

with harmful levels of blood sugars can be without any tell-tale symptoms. The first step in preventing the complications of diabetes is to go for regular health checks. A simple blood test can determine whether you have diabetes or pre-diabetes.

Your genes determine whether you are at risk for developing diabetes, but many other modifiable factors also play a part. The good news is that 9 in 10 cases of diabetes can be prevented by simple lifestyle modifications and healthy eating habits. These **FOUR** simple tips are especially important if you have been found to be pre-diabetic.

### 1. Get active

An active lifestyle helps prevent diabetes. Exercise makes muscles use insulin and absorb sugars better. Even a simple activity like brisk walking every day can achieve this. It also helps you lose weight and improve cardiovascular fitness.

### 2. Eat right

Consumption of processed foods and refined sugars, such as those found in cakes, desserts and sweet drinks, increases the risk of diabetes. Choose whole grains, instead of white bread and white rice, for your daily portion of carbohydrates. The bran and fibre they contain have a low glycaemic index and do not cause the big spikes in blood sugar levels which add stress to the body's insulin needs.

Likewise, avoid trans fats that are found in fried foods and margarine. Substitute with the good polyunsaturated fats that are found in vegetable oil, seed and nuts. For healthy proteins go for fish and white meat from poultry. Red meats such as beef, pork and lamb contain a high iron saturation and this may increase the risk of diabetes.

### 3. Stop smoking

Smoking increases the risk of diabetes, not to mention the long list of harmful effects it has on your body. So stop smoking.

### 4. Achieve and maintain a healthy weight

This is probably the most important bit of advice. If you are obese, you are 20 to 40 times more likely to develop diabetes. Losing even 10 % of your excess weight can decrease your risk of diabetes by half. Diet and exercise are the cornerstones of any weight loss plan, but if you are unable to lose weight by conservative measures alone, you may want to consider a Metabolic Surgery procedure to help you lose weight and prevent the onset of diabetes. For patients who are already diabetic, Metabolic Surgery has been found to be a highly effective and durable treatment for diabetes.

### What is Metabolic Surgery?

Metabolic Surgery refers to surgical procedures used in the treatment of metabolic diseases, especially diabetes. They are minimally invasive keyhole procedures similar to the weight loss procedures that are commonly done for obese patients. The majority of patients will achieve an Excess Weight Loss of about 70 to 80% after 18 to 24 months. In addition, these operations also have a complex adaptive effect on our gastrointestinal hormones which play an important role controlling blood glucose levels. As a result, metabolic surgery has an additional beneficial effect on the control and prevention of diabetes beyond weight loss alone. **LW**

**Symptoms**

- WOUNDS HEAL SLOWLY
- ALWAYS THIRSTY
- EXTREME FATIGUE
- PRESSURE
- HIGH BLOOD SUGAR

**Treatment**

**Prevention**

- HEALTH FOOD
- KEEP NORMAL WEIGHT
- FOOD CONTROL
- DIAGNOSTIC
- EXERCISE



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