Some people may need medications and even insulin injections in order to achieve normal blood glucose levels.

**Diabetes and the diet**

A person with diabetes needs to eat a varied, balanced diet rich in foods containing dietary fibre, as described by the food pyramid guide. Two portions of fruit and three portions of vegetables are recommended daily. One portion has a weight of 80gms. It is important that food portion sizes reflect the amount of energy used so that weight is kept within the normal range. Foods with added sugar should be avoided. The booklet ‘Id-diabetes u l-ikel’ from the Health Promotion and Disease Prevention Directorate gives further information. The dietician who is part of the diabetic team at Mater Dei Hospital will also give advice.

**Diabetes and exercise**

Being active is very important for everyone and especially for people who have diabetes. It is important to be moderately active for at least 30 minutes five times a week. While active, it is important to feel slightly out of breath and have a faster pulse rate. One can do this by going for brisk walks, using the stairs instead of the lift, and walking instead of using the car. Seek advice from your doctor and fitness instructor to combine nutrition, exercise and medication.
What is Diabetes?

Diabetes is a common and serious life-long condition, affecting around 10% of people in Malta. Diabetes is a condition where the amount of glucose (a type of sugar) in the blood is too high as the body cannot use it properly. This is because the pancreas does not produce any or enough insulin to use glucose properly or the insulin does not work (insulin resistance). Insulin is the hormone the body uses to control the amount of glucose in the blood and to change glucose into energy.

There are two main types of diabetes. Type 1 diabetes usually develops in childhood or adolescence and patients require lifelong insulin injections to replace the insulin not being produced by the body. Type 2 diabetes usually develops in adulthood and is related to obesity, lack of physical activity and an unhealthy diet. Type 2 diabetes is the more common type, affecting 9 out of 10 diabetics. As overweight and obesity in children is becoming more common, the risk of Type 2 diabetes is also increasing.

The risk factors

There is a higher risk of developing diabetes in those who are:

- Over 40 years of age
- Have parents, a brother or sister with Type 2 diabetes
- Overweight or obese
- Have a waistline greater than 94cm for men or 80cm for women
- Have high blood pressure or have had a heart attack or stroke
- Female and have had gestational diabetes (diabetes in pregnancy)
- Have been told that have impaired glucose tolerance

In type 1 diabetes, the insulin-producing cells in the pancreas have been destroyed. There is nothing to be done to prevent type 1 diabetes, as it is not yet known what causes it.

Discuss with the family doctor or nurse what can be done to reduce the risk of diabetes.

Symptoms

Symptoms occur because glucose stays in the blood and is not used as a fuel for energy. The body tries to get rid of the glucose by removing it from the body in urine.

When diabetes is not diagnosed for some time, one may:

- Pass urine more often than normal, especially at night
- Feel thirstier than usual
- Feel very tired
- Lose weight unexpectedly
- Eat more than usual

- Get genital itching or regular episodes of thrush

In Type 1 diabetes, the signs and symptoms appear quickly and are very obvious, while in Type 2 diabetes, they usually appear slowly and may only be picked up by a routine medical check up.

Diagnosis

Ask the family doctor or nurse to test for diabetes (every year when over 40 years).

When diagnosed with diabetes, regular blood tests will be done. The target is to achieve a glucose level of less than 8.5mmol/L two hours after meals. During pregnancy, control is much stricter. Around once a year, the HbA1c test is carried out to check blood glucose control over the past three months. Normal HbA1c is considered to be 6.5% and below at Mater Dei Hospital.

Diabetes care

Although diabetes cannot yet be cured, it can be managed very well so that one can continue with a normal day-to-day life. Good control of blood sugar level, blood pressure and blood fat levels will reduce the risk of heart attack, stroke, blindness, kidney failure and amputation. It is very important that people with diabetes do not smoke, as it increases the risk of developing complications. People with type 2 diabetes need to adopt lifestyle changes, by following a healthy balanced diet, regular physical activity, and losing weight if needed.