

Type 1 Diabetes - A Summary

This leaflet gives a summary of Type 1 diabetes. There is a separate more detailed leaflet on Type 1 diabetes, and also a leaflet on Type 2 diabetes.

What is diabetes and what causes Type 1 diabetes?

Diabetes occurs when the level of glucose (sugar) in the blood becomes too high. Normally, after we eat, various foods are broken down in the gut into sugars which are then absorbed into the body. The main sugar is called glucose. To remain healthy, your blood glucose level should not go too high or too low. A hormone called insulin helps to take glucose from the bloodstream into various cells of the body. This helps to keep the blood sugar normal.

Insulin is made by special cells in the pancreas. In Type 1 diabetes the pancreas stops making insulin, and so the blood glucose remains high. This occurs because the immune system makes antibodies which destroy the insulin-making cells in the pancreas. It is not known why the immune system does this. Type 1 diabetes usually first develops in children or young adults.

What are the symptoms of Type 1 diabetes?

Symptoms tend to develop quite quickly, over a few days or weeks. They include: excess thirst, passing large amounts of urine, tiredness, weight loss, and feeling generally unwell. After treatment is started these symptoms soon go. But, *without treatment*, the blood glucose level will go very high which can cause you to become very ill, lapse into a coma, and die.

Possible long term complications which may develop

Even a mildly raised glucose level which does not cause any symptoms in the short-term can affect the blood vessels in the long-term. This may lead to some complications (often years after diabetes is first diagnosed). These include: an increased risk of heart disease, stroke and poor circulation; eye and vision problems; kidney damage; nerve damage; serious foot problems; impotence. In general, the risk of developing complications is reduced if the blood glucose level is well controlled, and other risk factors such as high blood pressure are dealt with.

What is the treatment for Type 1 diabetes?

Treatment to keep your blood glucose level as near normal as possible. You will need insulin injections for the rest of your life. Most people take 2-4 injections each day. There are various types of insulin and the one advised will be tailored to your needs. You should aim to eat a low fat, high fibre diet with plenty of starchy foods, fruit and vegetables. But, you will need to know how to balance the right amount of insulin for the amount of food that you eat. So, you will normally be given a lot of instruction and advice from a dietician and diabetes nurse.

To reduce your risk of future complications your blood pressure should be well controlled. Medication may be needed for this. In addition you are strongly advised: not to smoke, to exercise regularly, and to lose weight if you are overweight. Some of these lifestyle issues may not seem to be relevant at first to young children with diabetes. But, as children grow, a healthy lifestyle should be greatly encouraged to reduce the risk of developing complications in the long-term.

Most people with Type 1 diabetes attend a diabetes clinic where doctors, nurses, dieticians, chiropodists, etc, advise on treatment, and aim to detect any complications as early as possible.