The Life Programme aims to empower you with knowledge and skills to help you better manage your diabetes. You, by enrolling onto the programme have decided to take control of your own disease condition. It is therefore important that you understand the value of monitoring your blood glucose levels. This pamphlet aims to help you to do just that.

Self-monitoring of one’s blood glucose levels plays a very important part in managing diabetes.

- It provides you, along with the rest of your health care team, with a better understanding of your blood sugar levels and how best to manage them in order to avoid complications both now and in the years to come. Good control of your blood glucose levels can help to reduce the risk of developing complications such as damage to the eyes, kidneys, nerves, heart and major arteries.
- Self monitoring can also help you, together with your doctor, decide how effective your therapy is, and whether you need to adjust your diet, weight, exercise or medication to improve your blood glucose levels and therefore your health.
- Self-monitoring also allows you to see how your body reacts under stress and illness.

“We are responsible for what we do no matter how we feel”

**What does self-monitoring of blood glucose involve?**

Self-monitoring of blood glucose is a quick and simple procedure. It involves drawing a drop of blood using a small device in order to monitor your sugar levels. Most newly diagnosed diabetics are shown how to measure their blood glucose levels by their doctor or health care professional. If you have not been shown, ask your doctor or clinic sister.

A wide range of devices are available for self-monitoring of blood glucose, but the basic procedure is similar for all of them. To self-test your blood glucose levels, you will need a blood glucose monitor, a test strip and a lancing machine. Here are a few basic steps to help you get an accurate blood glucose reading:

- Wash your hands in warm, soapy water, then rinse and dry them completely. Never use alcohol swabs to disinfect the finger. Warming and lightly massaging the fingers can help increase the blood flow.
- Let your arm hang down at your side briefly to allow blood to flow to the fingertips.
- Grasp the finger near the fingertip and squeeze for three seconds.
- Prick the side of your fingertip with a sterile lancet (needle) and squeeze gently until you get a good drop of blood. Be careful not to squeeze too hard.
- Place the drop of blood on a test strip. It should cover the whole area.
- Place the test strip in the blood glucose monitor.
- Wait for the reading.

It is important that the results from your blood glucose test are accurate, irrespective of the monitoring device that you are using. Your ‘blood glucose monitoring technique’ should be regularly assessed by your doctor or health care professional.

Despite training, many people obtain inaccurate results through poor technique. The size of the blood drop, how it is placed on the test strip and the inaccurate calibration of the blood glucose monitor can all affect the accuracy of the test. It is very important to read and follow the instructions of the machine that you use as the procedure can vary with different devices.

It is very helpful if you keep a proper record of your test results. Some monitors have a memory in which results can be stored. It is ideal however to keep a diary or notebook with your blood glucose results, date and time that they were done, and any other information that might affect your blood glucose levels. Write your results down every time you test your blood glucose levels. Checking your blood glucose allows you and your health care team to analyse your readings and make changes if necessary.

It is important to test your blood glucose level regardless of whether you are a person with Type 1 or Type 2 diabetes.
When should self-monitoring of blood glucose be done?

When and how often self-monitoring should be carried out depends on the individual and his or her particular circumstances. In general, regular monitoring is recommended.

- Monitoring before breakfast, mid-morning and 2 hours after a main meal is most useful for assessing high blood glucose levels (hyperglycaemia), while monitoring before main meals and before going to sleep are best for detecting low blood glucose levels (hypoglycaemia).
- Monitoring at different times of the day is more useful than a test each day at the same time, as it will provide more information on the daily change in blood glucose levels that do occur.
- There are eight times in the day that are usually recommended for testing: before breakfast, 2 hours after breakfast, before lunch, 2 hours after lunch, before supper, 2 hours after supper, before bed and between 02h00 – 04h00. You can however, check your blood glucose levels as often as you feel the need to.
- The more you check your blood glucose levels, the better able you are to control them and keep them in a safe, target range.
- Monitoring blood glucose before and after exercise, after alcohol intake, and in situations in which hypoglycaemia could be dangerous, e.g. before driving, can be helpful.
- For pregnant women with diabetes, frequent monitoring is important in order to avoid any complications. Discuss the most appropriate timing and frequency for your monitoring with your doctor or health care professional.
- Some people prefer not to self-monitor their blood glucose levels. It is then important to have regular checks at your pharmacy or doctor.

What should my blood glucose level be?

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Ideally, most blood glucose test results should be within the normal range, which is between 4 and 7 mmol/L. However, these values vary from person to person and you should ask your doctor for the range that you should keep your blood glucose in.

What if my blood glucose is poorly controlled?

Blood glucose levels may be less well-controlled in some people than in others. These people may need to make changes to their diet, exercise or medication. Always talk to your doctor before you make any change.

- **Diet**
  The recommended diet for people with diabetes is much the same as a healthy diet for anyone. Eat plenty of fibre, fruit and leafy green vegetables, and cut down on sugar and fatty foods. It is important to eat regular meals and never to skip meals. Consult your first mailing in this series for tips on diet and consider making an appointment with a dietitian.

- **Exercise**
  Most people with diabetes will benefit from regular exercise. Physical activity helps prevent weight gain and helps make insulin work more efficiently. You do not need to do anything too strenuous, especially if you are not used to exercise. Walking, swimming, dancing or gentle jogging are all good forms of exercise. Consult the Life Programme exercise guide for more valuable tips on exercise and consider seeing a biokineticist.

- **Medication**
  Oral anti-diabetic tablets may be prescribed if your diabetes is not adequately controlled by diet and exercise alone. These tablets help to lower blood glucose levels. Some people may even need insulin injections.

What is HbA1c?

Your blood glucose levels vary throughout the day, even with regular daily monitoring. It is impossible to know what your overall level of control is. The HbA1c test measures the amount of sugar that attaches to protein in the red blood cells. Your red blood cells live for about 2-3 months, so the HbA1c shows your average blood glucose levels during this time. This test, which has to be done by the doctor, does not replace your day-to-day self-monitoring test. Your doctor may use this test result along with your daily test results to measure your overall diabetes control.

Why is this test so important?

The HbA1c result is given as a %. It has been demonstrated that the closer to normal your HbA1c level is (< 7% = optimal, 7-8% = acceptable), the less likely your risk of developing the long-term complications of diabetes. Everyone with diabetes benefits from having their HbA1c tested.

FOR MORE INFORMATION
CONTACT YOUR HEALTH CARE PROFESSIONAL
OR
PHONE THE LIFE PROGRAMME
0860 101 355
MONDAY - THURSDAY
09H00 to 15H00

Disclaimer:
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