PRE-DIABETES:
WHAT IS IT AND HOW DO I MANAGE IT?

This PIL educates patients about the implications of a diagnosis of pre-diabetes, highlighting that high blood glucose levels are an early warning about the risk of type 2 diabetes and encouraging the patient to make lifestyle and dietary changes.

What is pre-diabetes?

Your blood glucose (or blood sugar) level is higher than normal but currently not high enough for you to be diagnosed with diabetes.

What happens to my body in pre-diabetes?

When we eat carbohydrates from sugary or starchy foods, our bodies break them down into glucose. The glucose then travels in our bloodstream into our cells to give us energy. The pancreas usually makes a substance called insulin, which acts like a key to let the glucose from our bloodstream into our cells.

In pre-diabetes, your body either doesn't make enough insulin or the insulin it does make is not used properly. When insulin is not used properly, it's called insulin resistance. Because the 'key' isn't working, glucose can't easily get from your bloodstream into your cells so it builds up in your blood.

At first, the pancreas makes more insulin to keep up with the need, but over time the pancreas can't make enough so your blood glucose levels rise. Being diagnosed as pre-diabetic is an early warning that you may be developing diabetes.

What are the signs and symptoms of pre-diabetes?

There aren't usually any symptoms with pre-diabetes, but your healthcare practitioner can do a simple blood test to check your blood glucose levels.

What causes pre-diabetes?

We don't actually know what causes pre-diabetes, but it's often linked to lack of activity and/or being overweight. You're more at risk of getting pre-diabetes if you:

- Are overweight or obese
- Are 45 years or older
- Have someone in your close family with type 2 diabetes
- Belong to an ethnic group that is frequently affected by diabetes (e.g. South Africans of Indian descent)
- Are physically inactive
- Have certain health conditions, including high blood pressure
- Have a history of heart disease or stroke
- Have polycystic ovary syndrome (PCOS)

- Have high cholesterol, high triglycerides and low HDL/LDL ratio
- Are a woman who had gestational diabetes or delivered a baby weighing more than 4 kg
- Have metabolic syndrome (a combination of high blood pressure, abnormal cholesterol levels and a large waist size)

Other factors that may contribute to the development of insulin resistance are:
- Certain medicines
- Having hormonal disorders or sleep problems

Why is it important to know that I have pre-diabetes?

If you have pre-diabetes, you have a 10 to 20 times greater risk of developing type 2 diabetes than someone with normal blood glucose. You may also have a higher risk of having a heart attack or a stroke. The good news, though, is that it may be possible to prevent the development of type 2 diabetes if you find out about your pre-diabetes early enough. So act now!

How is pre-diabetes treated?

Self-care: The goal of treating pre-diabetes is to prevent you from getting type 2 diabetes. Research shows that up to 58% of people with pre-diabetes can prevent type 2 diabetes from developing, by eating well and exercising.

Manage your weight: Losing just 5 to 7% of your body weight can significantly reduce your risk of getting type 2 diabetes.

Exercise regularly: Physical activity helps your body to use insulin better and to keep blood glucose levels under control so start by reducing the amount of time you spend sitting down. Take the stairs rather than a lift, take phone calls standing up and go for a walk in your lunch break. Also, talk to your healthcare practitioner about starting or changing an exercise programme. Do some aerobic exercise (such as brisk walking, running or cycling) and some resistance training (such as lifting weights).

Eat a healthy, balanced diet:
- Reduce the amount of calories you eat
- Avoid saturated fats like takeaway foods, cakes, pastries and full-fat dairy products
- Choose a wide range of high-fibre, low-GI (glycaemic index) foods
- Avoid excessive alcohol
- Don't add sugar to tea and coffee and avoiding sugar-sweetened drinks
- Visit a dietician to help you come up with some meal plans and get ideas and recipes from diabetes websites and cookbooks.

Stop smoking

Medication: Your healthcare practitioner may prescribe metformin to help you control your blood glucose levels. Metformin reduces insulin resistance and allows the body to use its own insulin more effectively.

When should I contact my doctor?

Have a blood test every year to measure your blood glucose levels, but contact your doctor sooner if you become excessively thirsty or tired, need to pee more frequently or get blurred vision.

Where can I find out more? | Websites

- Diabetes SA
- Centre for Diabetes and Endocrinology
- Diabetes Education Society of South Africa
- Sweet Life, a diabetes community for South Africa
- American Diabetes Association
- International Diabetes Federation
- Diabetes UK

Support groups / Helplines:

- Diabetes SA 086 111 3913
- Diabetes SA's local support groups