

Understanding pre-diabetes

Pre-diabetes is a condition in which blood glucose levels are higher than normal, but not high enough to be diagnosed as diabetes.

Pre-diabetes has no signs or symptoms, making it difficult to detect. It is a risk factor for the development of type 2 diabetes and cardiovascular disease, such as heart disease and stroke. Pre-diabetes affects about 16% of adults in Australia.

Who is at risk of pre-diabetes?

Pre-diabetes usually occurs in adults but younger people can also develop this condition. Risk factors for pre-diabetes are the same as those for type 2 diabetes. These include:

- » having a family history of type 2 diabetes
- » being above the healthy weight range
- » having an inactive lifestyle
- » being from an Aboriginal or Torres Strait Islander background
- » having gestational diabetes during pregnancy
- » having polycystic ovary syndrome.

People who have pre-diabetes can delay and, in some cases, prevent the development of type 2 diabetes by following a healthy lifestyle. This includes regular physical activity, making healthy food choices and maintaining a healthy weight.

How is pre-diabetes managed?

Pre-diabetes is managed by making healthy lifestyle changes to reduce the risk of developing type 2 diabetes and heart disease. These include:

Weight loss – If you are above the healthy weight range, losing as little as 5-10% of your weight can help lower blood glucose levels and reduce your risk of developing diabetes and other conditions such as heart disease.



Regular physical activity – Being active can help you manage your weight and reduce your blood glucose levels. It can also help manage other risk factors, such as blood pressure and cholesterol levels. Aim to do at least 30 minutes of ‘moderate intensity’ physical activity (such as brisk walking or swimming) every day.

Try to include some resistance training (such as body weight exercises like squats or lunges or light weights) twice a week to improve the way your muscles work. Always talk to your doctor before starting any new type of physical activity.

Healthy eating – Choose a wide variety of foods including fruit, vegetables, wholegrains, lean meats and low-fat dairy foods. Include high-fibre, low-glycemic index (GI) carbohydrate foods. To manage your weight, it’s important to reduce your total energy (kilojoule) intake. Limiting saturated fat can also help your body’s insulin work better and keep blood fats in the target range.

A dietitian can help by recommending the best food choices for weight loss and for reducing your risk of developing type 2 diabetes.

Blood pressure and blood fats (cholesterol and triglycerides) – It’s important to keep these in the target range that your doctor recommends. Blood pressure and blood fats should be checked regularly.

Smoking – Smoking can also increase your risk of developing type 2 diabetes and heart disease. If you smoke, try to quit. Some people find this difficult, so if you feel you can’t give up smoking on your own, ask for help – talk to your doctor or call the Quitline on 137 848.

If you have pre-diabetes, it’s important to have an annual health check, including screening for type 2 diabetes. By making healthy lifestyle changes, type 2 diabetes can often be prevented or delayed.



How is pre-diabetes diagnosed?

To diagnose pre-diabetes, your doctor will send you to have your blood glucose levels checked at a pathology lab. There are two blood tests that can be used:

- **A fasting blood glucose or a non-fasting random blood glucose**
This involves having blood taken from a vein in your arm. This test may be done fasting (after nothing to eat or drink for at least eight hours) or non-fasting. If your blood glucose levels are above the target range (but not high enough to be diagnosed as diabetes) you will need further testing.
- **An oral glucose tolerance test (OGTT)** You will have a fasting blood glucose test first. You will then be given a sugary drink and have your blood checked again two hours later. The results from the OGTT will show whether your blood glucose levels are in the normal, pre-diabetes or diabetes range.

If you have pre-diabetes, you will have one or both of the following conditions:

- **Impaired fasting glucose:** This is when your fasting blood glucose level is higher than target levels, but not high enough to be diagnosed as diabetes.
- **Impaired glucose tolerance:** This is when your blood glucose level is higher than the target range two hours after an OGTT, but not high enough to be diagnosed as diabetes. Your fasting blood glucose level may still be within target.

The NDSS and you

A wide range of services and support is available through the NDSS to help you manage your diabetes. This includes information on diabetes management through the NDSS Helpline and website. The products, services and education programs available can help you stay on top of your diabetes.

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