

Pre - diabetes

Patient Information Leaflet

Some patients have a blood sugar level which is higher than normal but not high enough to be called diabetes. This is called pre-diabetes and can be identified by blood sugar (glucose) tests. It means raised blood sugar and a higher risk of getting diabetes and heart disease. Making changes to your lifestyle can delay or even prevent the development of type 2 diabetes and reduce the risk of heart disease too. This has now been proven in several large research studies.

Heart risk: People with pre-diabetes often have high blood pressure and, are twice as likely to develop cardiovascular disease (e.g. angina, heart attack and stroke)

Diabetes risk: If no action is taken, 33 out of 100 people with pre-diabetes (a third) will develop type 2 diabetes within 6 years. Doctors consider this to be a high level of risk and it is over ten times the risk of the average person getting type 2 diabetes. The risk you have now of getting diabetes is about the same as you pulling the short straw out of three straws offered to you.

What can I do to help?

You should have a blood test every 6 months to measure your blood glucose level as you are now at a higher risk of developing diabetes. Making small changes to your lifestyle to make it a healthier lifestyle will help to reduce your risk of developing diabetes.

What can I do to reduce my chances of getting diabetes and heart disease?

The good news is that for many people with pre-diabetes, diabetes can be delayed or prevented by increasing your physical activity, making changes to what you eat and by losing weight. Keeping these changes going over time improves your overall health and reduces your heart disease risk too. Out of 100 people with pre-diabetes who make 'healthy lifestyle' changes, only 13 will develop diabetes (compare this with 33 out of 100 if no action is taken!). The more changes you can make the better.

Healthy Eating and Weight

If you are overweight the most important thing is to try and lose weight. The best way to do this is to follow a healthy diet and take regular exercise. In particular look at the amount of fatty and sugary foods/drinks you take.

What Is Healthy Eating?

1. **Eat regularly** Have 3 meals a day. For example, breakfast, lunch and evening meal. This will help keep your blood glucose levels steady and control your appetite.
2. **Include a starchy carbohydrate food at each meal** Starchy foods include cereal, bread, pasta, rice, potatoes. High fibre options are best. See the table below for more information.

Starchy Carbohydrate to eat less of	Choose more of these starchy carbohydrates
Sugar or honey-coated breakfast cereals, for example, Frosties, Coco Pops, sweetened muesli, sugary cereal bars	Wholegrain breakfast cereal, for example, Weetabix, unsweetened muesli, Shredded Wheat, Branflakes, porridge
Fried Chips, Instant Mash, Roast Potato	Boiled Potatoes, New potatoes, Sweet Potato, Baked Potato
Fried rice, cheesy pasta dishes	Basmati rice, pasta, chapatti
White bread or rolls	Whole grain, granary, seeded bread or rolls

3. Eat less sugar

Too much sugar and foods containing sugar can cause the blood glucose levels to rise. It is best to replace these with lower sugar and sugar free foods instead. See the table below for examples.

Foods High in Sugar to eat less of	Foods Lower In Sugar/Sugar Free
Sugar, glucose, glucose syrup, dextrose, sucrose, icing sugar, light spoon, half spoon	Artificial sweeteners, for example, Canderel, Sweetex, Hermetas, Splenda
Sweet squash and fizzy drinks, for example, Ribena, Lucozade, cola, lemonade, drinking chocolate	Diet, low calorie, sugar-free squash and fizzy drinks, for example, Robinsons Special R, Diet Coke, Pepsi Max, tea, coffee
Sweets, for example, chocolate, toffee, fudge, tablet, mints, chocolate covered and cream filled biscuits, cakes, marzipan	Plain biscuit or small scone, small crumpet or pancake, oatcakes, crackers
Sugar-coated or honey-coated breakfast cereal, for example, Frosties, Sugar Puffs, Crunchy Nut	Unsweetened breakfast cereal, for example, Porridge, Weetabix, Branflakes, Allbran
Sweet puddings, crumble, tarts, tinned fruit in syrup	Fresh or dried fruit, diet or light yoghurt, sugar-free jelly, tinned fruit in natural juice
Marmalade, jam, honey, syrup	Reduced sugar marmalade, jam or thin scraping of ordinary jam, marmalade or honey

4. Eat less fried and fatty foods

High fat diets are linked to heart disease and reducing your fat intake will help you lose weight. See the table below for information on how to reduce your fat intake.

Foods High in Fat	Choose Foods Lower in Fat
Butter, Margarine, oil, lard, dripping	Low fat spread and oils made from unsaturated oils such as olive oil, vegetable oil, corn oil, monounsaturated spreads
Fried foods	Grill, poach, boil, microwave or oven bake food
Chips	Potatoes – boiled, steamed or baked
Pies, pastries, sausage rolls, fatty meat	Lean cuts of meat, fish and chicken without skin
Creamy sauces and dressings	Tomato based sauces
Cream, mayonnaise, salad cream, full fat yoghurt, full fat milk	Low fat natural yoghurt, low fat fromage frais, semi skimmed or skimmed milk
Full fat cheese, Crisps, savoury snacks, nuts	Reduced fat varieties of cheese, Lower fat cheese such as Edam, gouda, cottage cheese, grate or slice cheese thinly

5. Eat fruit and vegetables – 5 portions a day

All fruit and vegetables are suitable and they can be fresh, frozen or tinned in natural juice. Try to have vegetables with your evening meal and spread your fruit throughout the day.

1 Portion =

1 medium fruit (apple, banana or orange)

2 small fruits (kiwis, satsumas or plum)

2 table

6. Include oily fish

Oily fish contains a type of fat called omega 3, which helps protect against heart disease. You should try to have oily fish in your diet at least once a week. Examples are sardines, pilchards, salmon, mackerel, fresh tuna, herring spoons of vegetables.

7. Eat less salt

Too much salt can raise your blood pressure which can lead to stroke and heart disease.

Avoid adding salt at the table. Use as little salt as possible in cooking.

Use herbs and spices to flavour food instead.

Avoid processed foods, tinned, packed foods, and salty meats.

8. Healthy Weight

Body weight and the risk of developing diabetes are closely linked. If you are overweight it is harder for your body to use insulin properly. A healthy weight will also help to reduce your risk of heart disease and stroke and control your blood pressure

Aim for a realistic weight loss (1-2lbs each week). It is better to lose a small amount of weight and keep it off, than to lose a lot of weight and regain it.

9. Limit your alcohol intake

The recommended amounts of alcohol for people with pre-diabetes and the general population are exactly the same.

For Men No more than 3 units/day (no more than 21 units in a week)

For Women No more than 2 units/day (no more than 14 units in a week)

Everyone should have at least one or two alcohol-free days a week. Alcohol is high in energy and may cause weight gain therefore sensible drinking is essential.

10. Smoking. If you smoke - quit now. Smoking greatly increases the chance of developing a serious health problem.

11. Physical activity Increased daily activity can help you to control your weight and reduce your risk of heart disease, high blood pressure and stroke.

It is a good idea to take up some form of regular physical activity, such as walking, swimming, dancing or cycling... even housework counts!!

Changing your lifestyle can have other great benefits too!

Any amount of weight loss, healthier eating or increases in physical activity can provide other strong benefits for your health. These include:

- Reduced risk of heart disease and stroke
- Lower blood pressure and cholesterol
- More energy
- Stronger bones, muscles & joints
- Physical activity can relieve stress and depression
- Sleeping better
- Reduced risk of some forms of cancer

Don't despair! Remember, it often takes several attempts to change lifestyle habits, so don't be put off if you don't succeed at first – instead, try to learn from the experience, figure out what went wrong, then plan how to do it better. Try and try again!

Key ways to reduce your risk

1. Activity! Aim for 30 minutes of activity at least 5 days per week (this should be something that makes you breathe faster or your heart beat faster). Try 20 minutes on 3 days per week in the 1st month.
2. Lose weight! Aim for 5% weight loss over several months. Try to lose 5 pounds or 2.5kg in 2-3 months at first. Be realistic about your target weight, and do it in gradual steps.
3. Eat healthy food! Replace fat (especially saturated fat) with healthier options. Build up to 5 portions of fruit and vegetables each day over some months.
4. Try to stop smoking! Start by seeking professional advice and make a clear plan before setting a firm date to stop.
5. Even making small changes can help to lower risks.