

Tynan Surgery – Information Booklet

Are you at risk of Type 2 Diabetes?

This booklet has been designed to help you to understand:

- Why you are at high risk of developing Diabetes.
- What you can do to lower your risk of developing Diabetes and stay healthy.

What does it mean to be 'at risk' of developing Type 2 Diabetes?

The number of people with Type 2 Diabetes is increasing worldwide. By the time people find out they have Diabetes, they often have a complication caused by their Diabetes such as eye or kidney disease. Type 2 Diabetes is a serious disease in which the body cannot keep blood glucose (sugar) levels within a healthy range.

We know that Type 2 Diabetes develops over a long time. There is a stage where blood glucose levels are higher than normal but not high enough to be classed as Diabetes. People who are picked up at this stage are often told that they are at 'high risk' of developing Type 2 Diabetes.

Until recently, you may have heard this stage called:

- Prediabetes
- Non Diabetic Hyperglycaemia
- Impaired glucose tolerance
- Impaired fasting glucose

All these names relate to someone having a higher risk of developing Type 2 Diabetes compared with the general population.

How can I tell if I am at high risk of developing Type 2 Diabetes?

Your GP may invite you to have one of two blood tests to measure how much glucose

1. You may have a fasting glucose test taken which measures how much glucose (sugar) is in the blood first thing in the morning after you have not eaten all night.
Or

2. You may have a blood test called an HbA1c. This test measures what your blood glucose (sugar) levels have been like over the past 8-12 weeks.

Look at the chart below and see where your results sit:

HbA1c level	31-41mmol/mol	42 – 47 mmol/mol	48mmol/mol plus
	Low risk Type 2 Diabetes	You are now at risk of developing Type 2 Diabetes	You have Type 2 Diabetes

What is my risk?

Your risk of developing Type 2 Diabetes will depend on the type and number of risk factors that you have. Research shows that within the next 10 years up to half of people at 'high risk' of developing Type 2 Diabetes will go on to develop it.

What are the symptoms of being 'at high risk' of developing Type 2 Diabetes?

There are no symptoms associated with being at high risk of developing Type 2 Diabetes. Symptoms only occur when blood glucose levels are high enough to result in Type 2 Diabetes.

Common symptoms of Type 2 Diabetes are:

- Feeling tired
- Going to the toilet to pass water often, especially at night time
- Feeling thirsty
- Being more prone to infections
- Blurred vision
- Weight loss

Many people can have Type 2 Diabetes for months or years without realising it. This is because the symptoms of Diabetes can quite easily be put down to old age. By this time some complications associated with Diabetes such as heart problems, nerve damage, eye and foot problems may have already developed.

How can being at 'high risk' of Type 2 Diabetes affect my future health?

Being at high risk of developing Type 2 Diabetes is associated with having heart problems such as heart attack, angina and stroke. Often these individuals already have high blood pressure and high cholesterol (fat levels). These are strong predictors of heart attack, stroke and angina.

Can I reduce my risk of developing Type 2 Diabetes?

Yes you can!

The good news is that everyone at risk of Type 2 Diabetes can do things to keep healthy and slow down or even stop the development of Type 2 Diabetes. Recent studies have shown that lifestyle changes are more effective than taking tablets in stopping the development of Type 2 Diabetes.

For every 100 individuals who develop Type 2 Diabetes over a given period of time, 90 cases may have been prevented by undertaking simple lifestyle changes.

These are:

- Be more active
- Keep a healthy weight
- Eat less fat, especially saturated fat
- Eat more fibre
- Reduce processed foods in your diet– high in salt

Exercise - How can being more active benefit me?

What is moderate activity?

Moderate activity refers to any activity that makes you feel breathless and increases your heart rate. As a rule of thumb, if you sing whilst exercising, you are at light intensity. If you can't sing, but can talk, you are at moderate intensity. If you can't talk, you are at vigorous intensity.

Many every day activities may count as moderate activity. You do not have to go to a gym. Walking, hoovering, gardening, shopping all can count as part of your daily activity. You will know if you are working at a moderate level as you will feel a little breathless but still be able to talk.

Be more Active!

Being active has many health benefits such as:

- Reducing your risk of developing Type 2 Diabetes by 50%
- Helping you to maintain a healthy weight
- Reducing your risk of having a heart attack by 30%
- Improving your blood cholesterol levels
- Reducing your blood pressure
- Helping to keep your joints healthy
- Helping with stress and depression

How much exercise should I do?

To reduce your risk of developing Type 2 Diabetes, aim for a minimum of 30 minutes of moderate intensity physical activity on most days of the week. Aim for this to add up to at least 150 minutes per week. The more activity you can do, the greater the health benefit for you.

Do I have to do the 30 minutes all at once?

The 30 minutes per day recommendation can be broken down into three 10 minutes chunks or two 15 minute chunks.

What if I can't do moderate activity?

Evidence suggests that even if you sit down less you can gain many positive health benefits. So getting up in TV adverts, breaking your sitting time and moving around a bit more will all help you to improve your health. The message for everyone, even if they are unable to be moderately active is to sit less and move more.

Having a healthy weight

Most of us know if we are overweight by looking in a mirror or by how our clothes feel. You may have had your Body Mass Index (BMI) taken which measures your weight in relation to your height.

Your shape, as much as your weight, will increase your health risk. Carrying excess weight around your middle increases your risk of developing Type 2 Diabetes and heart disease.

You can find out if your weight is putting you at risk, by simply taking your waist measurement. Find the bottom of your ribs and the top of your hips, and measure around your middle at a point half way between these. For many people this will be around where your tummy button is.

Use the chart below to check if your weight/waist increases your risk:

Male	Less than 69 cm Less than 27 inch	97 cm 38 inch	More than 103 cm More than 41 inch
Female	Less than 60 cm Less than 24 inch	81 cm 32 inch	More than 89cm More than 35 inch

The 30 minutes per day recommendation is thought to be the minimum to gain meaningful health benefits. In general terms the benefit of physical activity works on a continuum, where some activity is better than no activity and the more you do the greater the benefit. Therefore, someone doing 45 minutes per day of moderate-intensity physical activity will gain greater benefit than doing 30 minutes. However, doing 30 minutes is better than doing 15 minutes and so on.

How can losing weight benefit me?

If your weight is putting you at risk, try to lose some weight to reduce your waist size. Losing 10% of your body weight can reduce your health risks hugely by:

- Reducing your risk of developing Type 2 Diabetes
- Reducing your risk of having a heart attack/stroke
- Lowering your blood pressure
- Lowering your cholesterol levels
- Improving your ability to move and do activities

Losing weight can also help you to feel more energetic, and also get into the clothes you want to wear! When thinking about trying to lose weight set yourself realistic targets that you know you will be able to follow.

Try not to be too ambitious with your goal, or you may be disappointed with the results.

For many people maintaining their current weight and not gaining more is a major achievement in itself.

What can I do to lose weight?

Think about where you can make small changes to your food choices. These changes should be realistic and manageable so that you can stick to them.

You may want to focus on:

- **How much food you put on your plate.** Large portions of healthier foods such as bread, potato, pasta, rice can still make you heavier if you eat these foods in excess.
- **Whether you snack in between your meals.** Regular snacking will add extra calories into your diet, which may make it difficult for you to lose weight.
- **The type of snack you choose.** Some snacks will be higher in calories than others. Try to choose lower calorie snacks where possible such as fruit.
- **How you cook your food or whether your meals are often ready-made.** Cooking your food in any type of oil or having ready-made foods, can provide you with lots of calories due to their high fat content.

If you are able to make changes to one or more of these and keep them going, this is a good starting point. Don't worry if you have a day where your diet doesn't go to plan, try and get back on track the next day.

How does a high fat diet put me at a higher risk of developing Diabetes?

Eating a high fat diet can make you heavier. Extra weight around the tummy will put you at a higher risk of developing Type 2 Diabetes and other health problems.

Reducing total fat and saturated fat intake

What is the link between saturated fat and increased risk of developing Diabetes?

Too much saturated fat in the diet can:

- Make it difficult for your body's insulin to do its job of managing blood glucose levels
- Raise your cholesterol levels

What is saturated fat and where is it found?

Saturated fat is a type of fat that can be found in many processed foods and in foods from animal sources. Foods high in saturated fat include:

- Fatty meats e.g. sausages, corned beef
- Butter/ghee/lard
- Cream/soured cream/full fat mayonnaise
- Cakes, biscuits, chocolates
- Sandwich spreads e.g. meat spread/full fat cheese spreads
- Full fat cheese
- Pastry coated foods e.g. pie/samosas
- Palm oil and coconut oil

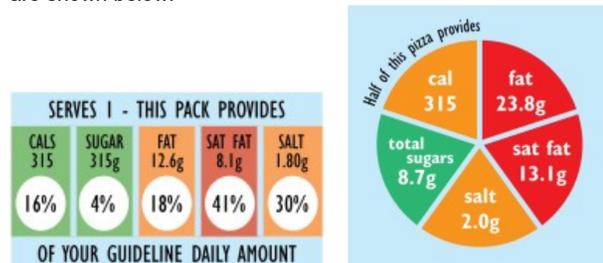
What can I do to eat less total fat and saturated fat intake?

Where possible try to:

- Choose lower fat products, as these will contain less total and saturated fat e.g. low fat margarine
- Cut off any visible fat on meat and take skin off chicken
- Swap butter for an oil when cooking such as olive oil/ sunflower oil (try to use only small amounts as these are still very high in fat)
- Measure the oil you use in cooking, to help you to manage how much you use
- Cook using a non-stick pan, as you need only the tiniest amount of oil to cook with
- Grill, boil, dry roast food where possible
- Try a spray oil as this will help reduce your fat intake hugely
- Choose healthier snack such as fruit if you are hungry in-between meals

What can help me to make better food choices?

Looking at food labels can be a way for you to learn more about the food you are eating. Most products have nutritional information on the label. Many have a traffic light system in the front to help you make healthier choices at a glance. Examples of how these may look are shown below:



GREEN – LOW

Choose these more often as they are a healthier choice

AMBER – MEDIUM

When you have a choice try to go for medium

RED – HIGH

Try to choose these less often or eat them in smaller quantities

The traffic light colours tell you whether the product has low, medium or high amounts of fat, saturated fat, sugars and salt. Most foods will either have a colourful grid or dial on the front packaging. Try to choose products with more green and amber and less with red. You don't need to avoid all foods high in fat, sugar or salt—it's the overall balance in your diet that is important. Eaten occasionally, or in small amounts, foods with more red labelling won't affect your overall diet.

Below are some statements you may have seen when you have been to the supermarket:

Low fat

- Food contains less than 3g per 100g or 100ml of the product.

Less than 5% fat or 95% fat free

- Food contains less than 5% fat per 100g e.g. if a ready meal size was 400g then the whole meal would contain 20g fat.

Reduced fat

- Food must contain 25% less fat than a similar standard product. It doesn't mean the product is low fat especially if the standard product is very high in fat.

Reading food labels can help you work out whether a food has a lot or a little of something in it. Look out for these products as they will be lower in fat.

A LITTLE	A LOT
These amounts or less more:	These amounts or more
2g of sugar	10g of sugar
3g of fat	20g of fat
1g of saturated fat	5g of saturated fat
For example, if a ready meal contains 30g of fat it would contribute a lot of fat to your daily intake.	

Below is a guide to help you choose foods that are lower in total fat, saturated fat, sugar and salts. Beware! Low fat options may be high on sugar!

	Sugar	Fat	Saturated Fat	Salt
What is HIGH per 100mg?	OVER 15g	OVER 20g	OVER 5g	OVER 1.5g
What is MEDIUM per 100mg?	5g – 15g	3g – 20 g	1.5g – 5g	0.3g – 1.5g
What is LOW per 100mg?	5 g and fewer	3g and fewer	1.5g and fewer	0.3g and fewer

How does eating more fibre reduce my risk of developing Type 2 Diabetes?

Evidence suggests that fibre is protective to the heart and it can also help to minimise the rise in blood glucose levels after eating.

Which foods are high in fibre?

Good sources of fibre include:

- Fruit
- Vegetables
- Wholegrain cereals
- Wholegrain bread
- Brown rice and pasta
- Oats
- Grains
- Peas
- Beans
- Lentils

How can I make sure I get enough fibre in my diet?

Try to include 5 portions of fruit and vegetables in your diet every day. Include these as snacks or puddings. The list below outlines what makes a portion:

- One piece of medium sized fruit such as an apple, peach, banana or orange.
- One slice of fruit, such as melon, mango or pineapple.
- A side salad.
- One handful of grapes or two handfuls of cherries or berry fruits.
- One small glass (150ml) of unsweetened fruit juice or vegetable juice. Juice counts as maximum of one portion regardless of how much you drink.
- A smoothie containing all of the edible pulped fruit and/or vegetables may count as more than one portion but this depends on how its made. Smoothies count as up to a maximum of two portions per day.
- One heaped tablespoon of dried fruit.
- A small 200g tin of fruit.
- Three tablespoons of fruit salad or stewed fruit.
- One portion of canned fruit equates to one piece of fresh fruit.
- A serving (roughly 80g) of vegetables, such as frozen or mushy peas, carrots or broccoli.
- Cooked dishes that contain significant amounts of vegetables may also count.

Where possible include a variety of starchy foods into your daily diet such as:

- Wholegrain/wholegrain cereal
- Pasta
- Basmati or easy cook rice
- Granary bread such as pumpernickel or granary bread
- New potatoes
- Porridge oats