



Irish Examiner

LET'S TALK DIABETES



IN ASSOCIATION WITH





Welcome to Let's Talk Diabetes, a partnership between Diabetes Ireland, the Irish Examiner and MSD. Regardless of whether you have diabetes or not, this booklet is essential reading for all.

One in three Irish families is now affected by diabetes. At present it is estimated that 190,000 people in this country are living with diabetes.

It is also estimated that a further 30,000 have type 2 diabetes, but are as yet undiagnosed.

More worrying is the finding in a recent VHI survey which showed that potentially a further 146,000 people are in a pre-diabetes state and if they do not move to a healthier lifestyle will develop type 2 diabetes.

With these numbers, it is likely that we all either know someone who has been diagnosed with diabetes, someone who is at risk of diabetes or someone who is displaying some of the symptoms but may not yet be diagnosed.

Diabetes Ireland is therefore delighted that on World Diabetes Day 2011, we can bring you this booklet containing lots of information on diabetes and how it may affect you.

We hope the contents will help you know how to

- actively reduce your chance of developing type 2 diabetes
- assess your risk of developing type 2 diabetes
- know the signs and symptoms that you need to look out for
- understand how diabetes is diagnosed
- gain more knowledge about the treatment and management of diabetes

You will also read true life stories of people living with diabetes in this booklet.

Living with diabetes is not easy. However, with the right advice and support, there is no reason why Irish people with diabetes cannot live life to the full.

If you need help, speak to your healthcare professional, or call the Diabetes Ireland Helpline (Call Save 1850 909 909) or visit www.diabetes.ie. We are there to help you.

We do hope you find this a useful resource and you start or continue your lifelong journey with diabetes.

Thank you to MSD for partnering with Diabetes Ireland on compiling and producing this booklet for World Diabetes Day 2011.

Production and design by Kieran Bohane
Compiled and edited by John O'Mahony



Kieran O'Leary
Chief Executive
Diabetes Ireland

WHAT IS DIABETES?



The term 'diabetes mellitus' means sweet urine, due the presence of glucose (sugar) in the urine.

DIABETES MELLITUS IS A LIFELONG CONDITION CAUSED BY A LACK, OR INSUFFICIENCY OF INSULIN.

Insulin is a hormone — a substance of vital importance that is made by your pancreas. Insulin acts like a key to open the doors into your cells, letting sugar (glucose) in. In diabetes, the pancreas makes too little insulin to enable all the sugar in your blood to get into your muscle and other cells to produce energy. If sugar can't get into the cells to be used, it builds up in the bloodstream. Therefore, diabetes is characterised by high blood sugar levels. Excess sugar is also excreted in the urine.

TYPES OF DIABETES

Before you got diabetes, your body automatically kept your blood sugar exactly at the right level. After a meal containing carbohydrates, sugar is absorbed into the blood stream very quickly. The amount of sugar in your blood must not get too high or too low. Two hormones — insulin and glucagon — were produced in the pancreas to ensure that the blood sugar was always well controlled no matter how much you had to eat and how much you exercised.

ARE YOU AT RISK?

The number of people with diabetes in Ireland is growing. At present there are an estimated 190,000 people with the condition with a further 30,000 as yet undiagnosed.

Knowing the symptoms and risk factors for diabetes is important as non-diagnosis can seriously affect your quality of life. Undiagnosed or poor controlled diabetes can damage your heart, arteries, eyes, nerves and kidneys, leading to serious

health problems for you and your family to cope with.

You are more at risk of getting Type 2 diabetes if you are:

- Over 40 years of age
- Have a parent or brother/sister with diabetes
- Had diabetes during a pregnancy
- Are overweight for your height
- Do not take 30 minutes of physical activity daily
- Have high blood pressure
- Have high cholesterol and/or recognise any of these symptoms:
 - Blurred vision
 - Fatigue, lack of energy
 - Extreme thirst
 - Frequent trips to the bathroom (urination) especially at night
 - Rapid and unexplained weight gain or loss
- Frequent infections
- Numbness, pain or tingling in your hands or feet.

The more risk factors or symptoms that you have the more likely you are to have diabetes or pre-diabetes.

IF YOU ARE WORRIED:

Speak to your GP and tell him/her why you think you may have diabetes. A simple diabetes test will ease any worries you may have.

If you are diagnosed with diabetes, don't worry. Your doctor will take steps to treat and control your condition. Early detection, effective treatment and good control will help you avoid the more serious health related problems of diabetes and allow you to maintain your quality of life.



TYPE 1 DIABETES

Type 1 tends to occur in childhood or early adult life, and always requires treatment with insulin injections. It is caused by the body's own immune system destroying the insulin-making cells (beta-cells) of the pancreas.

RISK FACTORS:

Having another auto-immune condition such as rheumatoid arthritis (RA), inflammatory bowel disease (IBD) and psoriasis. Having a parent or sibling with Type 1 diabetes combined with other factors.

SYMPTOMS:

Fast onset of extremely high blood sugar levels which cause weight loss, hunger, fatigue, thirst and frequent urination.

NATURE OF ILLNESS:

Autoimmune condition, your cells kill off your insulin-producing (beta) cells. Body no longer makes insulin.

ONSET:

Quick onset: Generally within a few weeks or months.

TREATMENT:

Intense daily self-management of insulin to balance food intake or exercise. Must take multiple injections of insulin or infusion through insulin pump.

Age when you get it: Typically early childhood or teenage years, but can occur at any age.

Numbers with Type 1 diabetes: 14,000 – of which 3,000 are under 18 years.

Is it preventable? No.

Is it reversible? No.

COMPLICATIONS:

Short-term complications give risk to acute emergencies such as hypoglycemia and ketoacidosis.

Long-term exposure to low blood sugar levels can cause hypoglycemic unawareness.

Long-term exposure to high blood sugar levels can cause blood vessel damage. Blood vessel damage can cause blindness, retinopathy, heart disease, kidney disease, amputation, gastroparesis and may result in early mortality.

TYPE 2 DIABETES

This usually develops slowly in adulthood. It is progressive and can sometimes be treated with diet and exercise, but more often Type 2 diabetes may require antidiabetic medicine and/or insulin injections.

RISK FACTORS:

Poor diet. Being overweight. Being sedentary. Genetics. Being over the age of 45. Belonging to high-risk ethnic group. If you had gestational diabetes or a baby weighing over 9 pounds. Certain medications.

SYMPTOMS:

High blood sugar, thirst, waking in the middle of the night to urinate, fatigue, high blood pressure, urinary tract infection, neuropathy. But may also have no symptoms or just mild thirst or repeated infections.

NATURE OF ILLNESS:

Insulin-inefficiency. Body makes insulin, but it isn't used properly by the body, or is not enough to meet body demand.

ONSET:

Slow onset: May be several years after blood sugars begin to rise. On average, 12 years pass between onset and diagnosis of Type 2 diabetes.

TREATMENT:

Daily self-management of food intake, exercise and medication. Over time roughly



40% may need to use insulin injections.

Age when you get it: Typically adults, but can occur at any age.

Numbers with Type 2 diabetes:

Approximately 190,000 people.

Is it preventable? Yes, up to 58% of cases are preventable with healthy diet and weight control.

Is it reversible? No, but Type 2 diabetes is more easily managed, for many by losing excessive weight and with healthy diet.

COMPLICATIONS:

Many people at diagnosis of diabetes may have already had up to 12 years exposure to long-term high blood glucose levels and have complications at diagnosis i.e. damage to large and small blood vessels throughout the body which causes blindness, retinopathy, heart disease, kidney disease, amputation, gastroparesis, and may result in early mortality.



350

number in millions of the people
with diabetes worldwide

43%

of people that
have never been
tested for diabetes

77%

of people that knows
someone with diabetes
(type 1 and 2 combined)

233,000

estimated number of
Irish people that will
have diabetes by 2020
(type 1 and 2 combined)

33%

of families affected
by diabetes
(type 1 and 2 combined)

90%

of people with diabetes
who said developing
a complicating illness as
a result of their condition
is their biggest fear

327,000

number of Irish children
either obese or overweight



190,000

number of Irish people
with diabetes
(type 1 and 2 combined)

30,000

number people in Ireland
with undetected diabetes

18%

of people screened
only once for diabetes

50%

of all lower limb
amputations carried out
between 2005-2010 were
linked with diabetes

12%

of Irish people over
60 with diabetes

1.5

number in billions of
obese people worldwide

146,000

number undetected
pre-diabetes and will
have type 2 diabetes
within five years

95%

of people aware of the link
between diabetes and obesity

Sources: Diabetes Federation, Red Cross, Safefood survey

One of the hardest things to deal with when diagnosed with diabetes is to accept it as a life-long condition .

Everyone reacts differently. Some are overwhelmed, shocked, afraid, angry and anxious. Some choose to hide their feelings. As you adjust to an enforced new lifestyle, it is important to remember there is help and advice out there.

Type 2 diabetes is a progressive disease, which means that over time your pancreas will produce less and less insulin. To keep good control of blood sugar, treatment needs to keep pace with your need for insulin. For this reason, the initial strategy your doctor recommends for you may change over time.

STAGES OF TREATMENT

In the early stages, you may be able to keep your blood sugar under good control simply by eating and exercising healthily. Once this is no longer sufficient to maintain good sugar control, your doctor will recommend starting an anti-diabetic drug.

This will help maintain acceptable blood sugar levels for a further period of time, but if high blood sugar becomes a problem again, you will need more than one drug. Eventually, some people need to inject a small dose of insulin in addition to their oral drug, and some may eventually need a more intensive insulin-based therapy.

HOW LONG WILL I SPEND ON EACH STEP?

The duration for which any one of these steps can control blood sugar is different for every person, so comparing yourself to other people with diabetes is not very helpful. Your diabetes care team will discuss the options with you when you need to move onto the next step and will help you move between steps.

THE ROLE OF DIET

Many people find that over time, diet alone becomes insufficient to maintain really good control. Although you move onto the next step in treatment, this does not mean that

COPING WITH DIABETES

diet is no longer important. Quite the reverse! Eating healthily throughout life increases the period of time for which each step can control your blood sugar. Controlling your weight to stay within a healthy target range also gives your body the best chance of staying on each step for as long as possible.





LEARNING ABOUT A HEALTHY DIET

The best way to learn how to eat healthily for your diabetes is to know where to look for help.

Creating meals using sensible proportions of the different food groups, eating and snacking healthily are all explained.

Your diabetes care team will provide you with plenty of information and you may be referred to a specialist in this field - who can help you plan a diet.

DRUGS USED TO TREAT DIABETES

There are many different drugs that can be used to treat Type 2 diabetes.

Many different terms are used to describe these drugs collectively.

Among these terms are 'anti-diabetic drugs'; 'oral hypoglycaemics' and 'OHAs' (oral hypoglycaemic agents).

All these terms mean the same thing, so don't get confused! We will use the term 'OHAs' since it is the shortest!

WHAT ARE THE OHAS?

There are several different families of OHAs. The names of some are complicated, but each describes a drug or group of drugs that act to lower blood glucose in a way unique to that family. The main families of OHA are the sulphonylureas (SUs), the biguanides, the insulin sensitisers (or thiazolidinediones), the α -glucosidase inhibitors, the prandial glucose regulators and the DPP4 inhibitors.

HOW DO THE OHAS WORK?

OHAs all work in slightly different ways. One thing they have in common is that they all compensate in some way for the body's inability to make and use enough insulin. Some stimulate the pancreas to make more insulin, some reduce the amount of glucose produced by the liver, some increase the sensitivity of the body tissues to insulin, and some slow down absorption of glucose from the gut. In excess, many of them can make you hypoglycaemic.

Is Diabetes preventable?

Yes and No. Diabetes may be hereditary, which means that some families are more at risk than others. However, recent research has proven that eating a healthy diet and exercising regularly can help you to reduce your risk of getting type 2 diabetes in later life.

There is a small percentage of people who are of normal weight and are active that develop type 2 diabetes and unfortunately, diabetes can not be prevented in this group of people.

The cause of type 2 diabetes is unknown but some factors put you more at risk

- Being aged 45 or older
- Being overweight
- Have a family member with Type 2 diabetes
- Had a large baby or gestational diabetes
- Not being active

How do you know when you have diabetes?

The main symptoms of untreated diabetes are increased thirst, passing a lot of urine, tiredness, blurring of vision and recurrent infections. The symptoms of diabetes can be so unclear that people put the problems they have down to “getting older” or other medications. You should have a test done every year (for those over 65 years) to check if you could have diabetes.

This may be done by your local doctor using a simple finger prick to check your blood glucose levels. The normal levels are less than 6mmol/l when you have not eaten and less than 7 mmol/l after eating. If your levels are higher than those, more tests may be necessary.

How will diabetes affect my life?

You may need to make some changes in your life when diagnosed with diabetes. You need to have a healthy diet and try to lose weight if you are overweight. You should try to exercise to the best level you can. Talk to your doctor or nurse about the most suitable type and intensity of exercise to fit into your lifestyle and general health. You should give up smoking as it is damaging your health and especially so when you have diabetes. You will need to have regular checks with your diabetes team and they may ask you to do some tests at home. If you drive a



vehicle you will need to inform the Vehicle Licensing Authority who will ask for a medical report from your GP before the next renewal of the license.

You will also need to inform your car insurance company. There is no loading on your car insurance for having diabetes.

I have diabetes, can I still have a baby?

Yes, absolutely. Pregnancy involves risks for all women - even those who never get ill. While your chances of having problems are higher than for women who don't have diabetes, studies have proven that the risks can be reduced by keeping your blood glucose level in good control. The risks of pregnancy will always be there, but knowing the facts will help you to reduce your risk and help you take action if you do run into problems.

I've just been told I have diabetes? I feel overwhelmed. What should I do?

Firstly, it is important to remember, you are not alone. There are many people who are willing to help and listen. This is a perfectly natural feeling and it should be discussed with people who you feel comfortable with, including your family, friends, and GP/nurse. Many people will find that the diagnosis of diabetes has a profound effect including anger, frustration, loneliness, sadness, depression and confusion. These feelings are part of the grieving process of adjusting to life with diabetes. You should discuss and explore these feelings with trusted friends and family, and even within local diabetes support groups.

To avail of private professional counselling, check out the diabetes counselling section of www.diabetes.ie for a list of accredited counsellors with an additional Certificate in Understanding Living with Diabetes.

CASE STUDY

'I was upset because I'd always thought only older people get diabetes'

GILLIAN STAFFORD, 30, an administration support worker with Merchants Quay Ireland, was diagnosed with type 2 diabetes four years ago. Gillian, who grew up in Meath, had suffered recurring ear and throat infections for the previous two and a half years. "I was getting antibiotic after antibiotic and taking a long time to get rid of these infections. I was due to go on holiday that summer but I had a bad ear infection and my GP wouldn't allow me fly. My mam said 'you've got two weeks off so you're coming home with me to Meath'. I went to the family GP who said she was going to investigate to see if there was something underlying the infections."

With heart problems running in Gillian's family, the GP recommended a blood test and said she'd do a glucose test too. "She said 'I'm testing you for diabetes even though I know you're very young'. She was very on the ball."

A fortnight later, Gillian was told she had type 2 diabetes. "I was glad to be diagnosed because I knew something was wrong. But I was upset because I'd always thought only older people get diabetes. The doctors told me it was genetic but I said no, it's not in my family. It was kind of a mystery in that way. They began to think I had a hormonal problem – sometimes with that you can get type 2 diabetes as well."

Gillian was subsequently found to have polycystic ovarian syndrome — a

condition in which there's an imbalance of a woman's female sex hormones. Type 2 diabetes is strongly associated with the condition. "Some people get type 2 diabetes from their lifestyle but I got it because of this syndrome."

"I'm being treated with diet and tablets. Before, I wouldn't have been very good at eating breakfast – I make sure I have it now. I used to get headaches between meals, not realising this was because I was hungry. Now I snack on fruit, yoghurt and nuts. I can have a few drinks at the weekend but not during the week. I have been feeling really good but in recent days I've had blackouts. I feel I'm doing everything I need to do but the hospital says I'm not doing enough. They say I'm not losing the amount of weight I should. They're not interested in the syndrome element even though that's contributing to my diabetes."

— Helen O'Callaghan



Picture: Maura Hickey

LOW BLOOD SUGAR CHECKLIST

People with type 2 diabetes may experience low blood sugar, known medically as hypoglycaemia. It's important to understand and recognise symptoms of low blood sugar, so you can treat them quickly and avoid more serious complications, such as fainting.

Use this checklist to help you get through an episode of low blood sugar, and talk with your diabetes healthcare team (primary care provider, endocrinologist and diabetes educator) about how to avoid future experiences.

☐ Check your blood sugar as soon as you experience symptoms of low blood sugar, which may include:

- ☐ Nervousness or anxiety
- ☐ Shakiness
- ☐ Sweating
- ☐ Tiredness
- ☐ Confusion
- ☐ Hunger
- ☐ Fast heartbeat

☐ Check your blood sugar 15 minutes after eating or drinking, and if it has not been raised, repeat these steps until your blood sugar is at or above 3.9mmol/l. If you experience low blood sugar at meal-time, go ahead and eat your meal as you normally would.

☐ It's important to treat low blood sugar right away to avoid more serious complications, such as convulsions (seizures) and loss of consciousness, which would require emergency treatment.

☐ Involve friends and family in your treatment plan, and make sure they know what to do if you experience low blood sugar and are unable to treat yourself.

☐ If you have ever experienced a condition called hypoglycaemia unawareness, which occurs when the

early warning symptoms of low blood sugar are not experienced before severe symptoms occur, it's especially important to monitor your blood sugar regularly.



☐ If your blood sugar is 3.9 mmol/l or below, eat or drink something that will raise it quickly. Fifteen grams of a carbohydrate that contains sugar works best, including:

- ☐ Five to six sweets, such as jelly beans
- ☐ One half-cup fruit juice or regular (not diet) carbonated soft drink
- ☐ One tablespoon sugar, jam or honey
- ☐ Three glucose tablets (available without a prescription at most pharmacies)

☐ Carry a blood glucose meter with you at all times, so you can easily check your levels. This is especially important if you're driving a car or engaging in any potentially hazardous activity.

CASE STUDY

'I didn't want this in my life. I cut out sugar and lost two stone'

WHEN the doctor told Mary Barry six months ago she had type 2 diabetes, her response was: "I don't want this in my life."

The 60-year-old had grown up knowing her grandmother had diabetes. "She was always injecting herself. I grew up with the smell of methylated spirits in the house. I have two sisters and a brother who developed diabetes — they've had a lot of complications. I got very upset."

WARNING SIGNS

The warning signs had been there, says Mary, from Fermoy, Co Cork. "I was extremely tired. I didn't have much energy. I found it difficult walking uphill — I'd be hoping somebody would come along and give me a lift. There had been heart trouble in my mother's family, so I thought it might be that."

But, along with the diagnosis, her doctor held out some hope. "She said it was manageable, that I could try to avoid medication by losing weight. I was a good few stone overweight, so the very same day I joined Weight Watchers. I'd done Weight Watchers before and hadn't had much success with it. But since last April I've lost almost two stone. The leader said this is the first time I really worked at it. I simply didn't want to be ill and get complications. It's amazing how good I feel. People tell me I look good and that brings an automatic lift."

Mary cut portion sizes, reduced her bread intake and stopped eating late at night. "I used to be a fierce one for



crisps and salted peanuts. I never thought I'd get diabetes because I don't have a sweet tooth. But if you eat processed food there's lots of sugar. People automatically think sugar is just dessert or the sugar they put in their tea. I eat more fresh vegetables and fruit now. I had a blood test and got a fantastic result. The doctor said the weight loss has made an amount of difference."

Mary has made 40-minute walks four times a week part of her new fitness regime. "I went on a long trek in the Glen of Aherlow recently with a group of friends. I was amazed at the energy I had for keeping up with them. My mind is set on losing more weight."

— Helen O'Callaghan

DIET AND DIABETES

One of the keys to treating diabetes is healthy eating and taking regular exercise.

As most people with Type 2 diabetes are overweight, it is important you lose weight gradually.

As well as healthy eating and physical activity, you may be prescribed tablets to control your diabetes. Diabetes is a progressive condition and, in some cases, taking tablets is not enough to maintain or achieve good control and it may be necessary for your doctor to start you on insulin.

TIPS FOR HEALTHY EATING

- Eat regular meals
- Base each meal on a starchy carbohydrate food such as bread, cereal, potato, rice or pasta (eat the appropriate portion)
- Limit your intake of sweet and sugary foods
- Reduce your fat intake and change the type of fat you eat
- Eat fruit and vegetables regularly, a total of 5 portions of a mix of fruit and vegetables every day
- Eat fish twice a week — both white and oily
- Avoid adding salt to food and cut down on processed foods
- If you drink alcohol, the recommendations are the same as for the general public, which is no more than 1-2 drinks per day for women (no more than 14 standard drinks weekly) or 2-3 drinks daily for men (no more than 21 standard drinks weekly)



REGULAR MEALS

- Have regular meals at regular times each day. Have a breakfast, a lunch or tea type meal and a dinner
- If you are hungry in between your meals you can have a low fat snack such as fruit or a diet yoghurt (low fat and reduced sugar)
- Eating regularly means you have to plan ahead. If, for example, you have to make a long journey, prepare some food to take with you so you can have something to eat at the normal time

CARBOHYDRATES

This food group has the largest effect on blood glucose levels because when they are digested

SOURCING CARBS:

STARCHY CARBOHYDRATES

- All types of bread and crackers
- Potatoes and cereals
- Pasta/Rice/Noodles

SUGARY CARBOHYDRATES

- All sweet foods (cakes, chocolate, biscuits, jams, marmalades, non-diet fizzy drinks etc.)

NATURALLY OCCURRING SUGARS

- Fruit and fruit juices
- Pulse vegetables (peas, beans, lentils)
- Dairy food (milk, yoghurt)



carbohydrates are broken down into glucose (sugar).

Carbohydrates consist of sugars and starches and are an important energy source for the body and brain. However, with diabetes, it is important to choose the right carbohydrates that help control blood glucose levels.

STARCHY FOODS

Starchy foods should form the basis of each meal. Choose similar sized portions of carbohydrate at each main meal as this can help to control your blood glucose levels.

Try to use wholegrain or wholemeal varieties of these foods to increase the fibre content of your diet, such as wholemeal or wholegrain bread, wholegrain cereals, wholewheat pasta and brown rice. Adequate fibre in the diet ensures healthy bowel functioning.

Eat six portions of these foods daily. You may require additional portions depending on your weight and activity levels. If you are referred to a dietitian, you will be advised on how many portions you should eat.

SUGAR AND SWEET FOODS

Sugar and sweet foods can cause your blood sugar level to rise rapidly outside the normal range.

Sugary foods can also be high in calories and cause weight gain, so for these two

reasons these foods should be limited.

Sweet foods should be reserved as a treat and not something to be indulged in daily. It is also important to choose foods that have a low sugar content. The table below shows suitable low sugar alternatives.

Low GI foods

Choose carbohydrates with a low GI (Glycaemic Index). GI refers to the rate at which glucose (sugar) is released from a food.

Foods that have a low GI release glucose slowly and are the best types of carbohydrate to eat for diabetes.

Starchy foods with a low GI include porridge, pasta, pulses, noodles, and wholegrain/multiseed/granary breads.

One portion of starchy food is:

- 1 medium potato
- 1 slice of bread
- ½ pitta bread or ½ roll
- 2 Ryvitas or 3 crackers
- 3 dessert spoons cooked rice/pasta/noodles/couscous
- 1 serving of breakfast cereal (1 weetabix, 1 medium bowl porridge, 5 dessert spoons of high-fi bre flakes)

Having Type 2 Diabetes increases your risk of heart disease, but eating less saturated fat in your diet can help reduce that risk. As well as eating less fat it is important to eat the right type of fat.

There are different types of fat in our diet:

- Saturated fat is the fat in our diet that contributes to raised cholesterol. Raised cholesterol increases the risk of a heart attack and stroke.
- Saturated fat is found in butter, lard, cream, fat on meat, meat products such as sausages and black and white pudding, cakes, tarts, take-away foods, crisps, chocolate, fudge and toffees.

Unsaturated fat in our diet helps to lower blood cholesterol. Unsaturated fat comes in two forms, monounsaturated and polyunsaturated.

Monounsaturated fat is found in olive oil, canola (rapeseed) oil, nuts such as peanuts, almonds, cashew

GOOD, BAD AND UGLY FATS

nuts and spreads labelled high in monounsaturates. Try to include more monounsaturated fats instead of saturated fats.

Polyunsaturated fat is found in sunflower, corn and soya oils as well as in spreads high in polyunsaturates.

Oily fish is rich in a specific polyunsaturated fat called omega 3 that is very heart protective. It reduces inflammation and helps lower cholesterol.

It is recommended to eat oily fish at least once a week. Oily fish includes salmon, sardines, mackerel, herring and trout.

HOW TO REDUCE YOUR FAT INTAKE

- Choose low fat dairy products e.g. low fat milk, low fat cheese and low fat yoghurt
- Choose a low fat spread instead of butter
- Choose low fat mayonnaise, low fat salad cream and fat free dressings
- Cut all visible fat off meat, remove the skin from poultry
- When cooking mince drain the fat off, and skim the fat off casseroles and stews
- Avoid frying and use alternative cooking methods such as grilling, boiling, steaming, poaching, microwaving or baking
- Avoid rich sauces and fatty gravies: skim fat off the meat juices for homemade gravy, or use tomato based sauces and gravy granules instead
- Do not add extra fat to your food once it is cooked, such as butter on potatoes or vegetables
- Eat fruit, low fat yoghurts, plain popcorn, crispbreads, rice cakes and cereal with low fat milk instead of cakes, tarts, crisps and chocolate

REMEMBER: Oily fish is rich in a specific polyunsaturated fat called omega 3. It reduces inflammation and helps lower cholesterol. It is recommended to eat oily fish at least once a week. Oily fish includes salmon, sardines, mackerel, herring and trout. Fresh, frozen, vacuum packed or tinned are all suitable, avoid fish coated in batter or breadcrumbs.



FRUIT AND VEGETABLES

Each day eat 5 portions from a variety of fruit, vegetables and salads. Fruit and vegetables are low in calories, low in fat and high in fibre and vitamins.

One portion is equal to:

- 1 medium sized apple or pear
- 1 small banana
- 2 small fruits e.g. 2 kiwis, 2 mandarins or 2 plums
- 10-12 grapes or strawberries
- 1 small glass (100-150mls) unsweetened fruit juice
- 4 stewed prunes or apricots
- 1 wedge melon or 1 slice pineapple
- 3-4 dessert spoons cooked vegetables
- 1 small bowl mixed salad
- 1 small bowl homemade vegetable soup

REMEMBER: Eat 3 portions of fruit every day. Avoid eating more than one portion at a time. Have fruit juice with meals.

SALT

On average Irish people eat at least 10g salt a day in their diet. A recommended safe level of salt in the diet is 6g per day.

Too much salt can contribute to high blood pressure and heart disease. If you have high blood pressure it is important to reduce your salt intake as much as possible.

To cut down on salt it is recommended to:

- Cut down on your intake of processed foods, especially ready prepared meals and takeaways, as processed foods are the main source of salt in the diet
- Avoid added salt in cooking or at the table
- Instead of salt, flavour your food with pepper, garlic, vinegar, curry powder, mustard, lemon juice, parsley and other herbs and spices.

WAYS TO ENSURE YOU EAT ENOUGH FRUIT AND VEGETABLES

- Add fresh fruit to breakfast cereals or have fruit juice at breakfast
- Always add salad vegetables such as tomato, lettuce, cucumber and onion to sandwiches or rolls
- Always have fresh, frozen or tinned vegetables with your main meal, try to have two portions
- Have fresh, frozen or tinned fruit in natural juice for dessert
- Have fresh fruit as a snack



WHAT'S ON THE MENU

SO NOW YOU HAVE SOME IDEA WHAT YOU SHOULD EAT AND DRINK,
PUT IT ALL TOGETHER AND SOME OF THESE SUGGESTIONS



BREAKFAST IDEAS

- Orange juice, Branflakes, low fat milk and a small banana
- Grapefruit segments, boiled egg and wholemeal toast with low fat spread
- Porridge with 1 dessertspoon of sultanas and a low fat no added sugar yoghurt
- Shredded wheat and strawberries (if in season), low fat milk and a natural yoghurt
- Weetabix and low fat milk, Ryvitas and reduced sugar marmalade
- Poached egg and grilled tomato, wholegrain toast and a low fat spread
- Oatibix, a kiwi and low fat milk, Crackerbread/Cracottes and a low fat spread

MENU SUGGESTIONS

SUMMERBERRY SMOOTHIE

100g frozen berries
200ml skimmed milk
intense sweetener to taste

Instructions: Place the berries and the milk in a food processor or blender and blend until smooth and frothy, sweeten to taste and serve.

Nutritional information:

(Serves 1)

Each serving contains:

- 93 calories
- 7g protein
- 16g carbohydrates
- 0g fat



PERFECT PANCAKES



Ingredients:

100g ground rice
pinch salt
300ml milk

25g cornflour
2 eggs, beaten
a little oil for frying

Beat together all the ingredients in a bowl. Heat a medium non-stick pan and brush with a little oil. Stir the batter mixture before adding a ladle-full to the pan — tip the pan so the mixture covers the base. Cook for 1–2 minutes on each side until golden. Repeat until the mixture has been used up (each time, stir the batter before adding it).

Nutritional information (Serves 6)

Each serving contains: 128 calories;
5g protein; 20g carbohydrates; 3g fat



LUNCH IDEAS

- Homemade vegetable soup, brown bread, low fat cheese and a piece of fruit
- Pitta bread sandwich made with tuna, sweet-corn and a teaspoon low fat mayonnaise, and a slice melon to finish
- Pasta with chicken and tomato sauce made with tinned chopped tomatoes, salad* and a natural yoghurt dressing
- Baked beans on granary bread toasted and a pear
- 1 egg omelette, a small bagel and a salad
- Sardines, tomatoes, wholemeal bread and an orange

*Salad suggestion: Lettuce, tomato, cucumber, onion and grated carrot



DINNER IDEAS

- Lean grilled pork chop and apple sauce, carrots and mashed potatoes
- Roast lamb, broccoli and cauliflower, a baked potato and low fat gravy
- Baked cod/haddock with lemon juice and black pepper, couscous with frozen peas and chopped mixed peppers
- Stir-fried chicken with vegetables and wholegrain rice
- Salmon marinated for ½ hour in orange juice, garlic and reduced-salt soy sauce, then baked, noodles and frozen peas
- Chicken and vegetable casserole, steamed or boiled potatoes
- Chilli Con Carne with pasta and a side salad

REMEMBER: Although these foods are healthy choices it is important to reduce portion size if you need to lose weight

SPICED LAMB WITH PITTA

- 150g lean minced lamb
- ½ teaspoon ground cumin
- pinch chilli flakes
- 1 tablespoon fresh coriander, chopped
- 1 small clove garlic, crushed
- 1 small onion, finely chopped
- a little beaten egg
- 2 or 3 small pitta breads
- 1 large tomato, chopped
- 25g white cabbage, finely chopped
- 1 tablespoon natural yoghurt

In a small bowl, mix together the lamb, cumin, chilli flakes, coriander, garlic and onion. Leave for 10 minutes. Then add enough egg to bind and form the mixture into four sausage-shapes, and press each on to a skewer. Place under a hot grill for 2–3 minutes on each side, until cooked through. When cooked, set aside and keep warm. Sprinkle the pittas with a little water

and place under the grill for 1 minute to brown, turning halfway through cooking. Then serve the pittas filled with the lamb, tomato, cabbage and yogurt.

These kebabs are also great served cold — store all the different bits separately and make them up just before you want to eat them.

(Suitable for freezing)

Nutritional information (Serves 1)

Each serving contains: 556 calories;

44g protein; 63g carbohydrates; 16g fat

SHEPHERDS PIE (20-30 mins, 200°C/gas mark 6)

- 175g lean minced lamb
- 1 medium onion, chopped
- 2 carrots, peeled and grated
- pinch cinnamon
- pinch mixed herbs
- 2 teaspoons plain flour
- 1 teaspoon worchester sauce
- 1 tablespoon brown sauce
- 200ml beef stock
- 1 teaspoon oil
- 1 leek, finely sliced
- 450g floury potatoes, peeled and chopped
- 2 tablespoons milk
- 2 tablespoons light creme fraiche
- 2 tablespoons parmesan cheese, grated

Place the lamb, onion and carrot into a non-stick pan, and cook for 5-6 minutes until the lamb is browned. Drain off excess fat. Stir in the cinnamon, herbs, flour, worchester sauce, brown sauce and stock, bring to the boil and simmer gently for 10 minutes.

Heat the oil in a small pan, add the leeks and fry for 3-4 minutes until tender. Put the potatoes into a pan of boiling water and simmer until cooked (12-15 mins).

Drain then mash, together with the milk and crème fraiche until smooth. Stir in the leeks and season with black pepper. Spoon the mince into a medium oven-proof dish and smooth over the potato and leek mixture then sprinkle over the parmesan.

Each serving contains: 386 cals;

26g protein; 53g carbs; 12g fat

Suitable for freezing





DIET TIPS FOR OLDER PEOPLE

As you age, your body needs fewer calories, especially if you are not very active. It is easier to eat well when you plan for your meals and make them enjoyable.

TRY THESE TIPS:

- Grocery shop with a friend. It is pleasant and can help save you money if you share items you can only use half of, such as a bag of potatoes or head of cabbage.
- Cook ahead and freeze portions to have healthy and easy meals on hand for days when you do not feel like cooking.
- Keep frozen or canned vegetables, beans and fruits on hand for quick and healthy additions to meals. Rinse canned vegetables and beans under cold running water to lower their salt content.
- Look for fruit canned in juice, instead of syrup.
- Set the table with a nice cloth and even a flower in a vase to make mealtime special.
- Eat regularly with someone whose company you enjoy

- Make home made soup with whatever vegetables you have available and an Oxo cube. Liquidise for easier eating, if necessary.



REMEMBER

- Make meal times social events.
- Join others for meals or start your own lunch club.
- If you get full quickly, eat little and often.
- Take as much exercise as you can, out of doors if possible (always check with your doctor before starting a new exercise routine).

Older people may have problems that reduce their ability to chew foods or have a smaller appetite. This can make it difficult to eat a well-balanced diet.

Here are some simple ways of increasing fibre in the diet:

- Mash bananas and mix with diet yoghurt for a healthy meal
- Have porridge or Weetabix for breakfast or in the evening



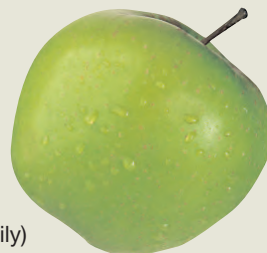
- Add fruit to breakfast cereal
- Pour some sesame seeds over porridge or add bran flakes
- Squeeze fresh oranges and drink the juice
- Liquidise fruits or a mixture of fruit and vegetables.
- Add sultanas to scones
- Make home made soup by boiling fresh or frozen vegetables and adding herbs or stock. Liquidise for added convenience. Add a tin of tomatoes in herbs for a different flavour.
- Add stewed prunes or fruit to baked custard.
- Ask your chemist for supplementary drinks specialised for people with diabetes. When eating out, a starter with soup can be a good option as a main course or ask for a half main course. When ordering food, ask for sauces on the side so that you can have as much as you need rather than having all the sauce. If you order a meal and if it is bigger than you expected, ask for part of it to be packed to bring home.



SNACK ATTACK

SNACK IDEAS

- Fresh fruit
- Diet or healthy yoghurt
- Crispbread / rice cakes or oat crackers with tomato/cucumber/small serving low fat cheese spread
- Small wholemeal scone with low fat spread
- Small bowl cereal with low fat milk
- Plain biscuits such as 1 Digestive/Fig Roll, 2 Rich Tea/Marietta/Gingernut (do not have as a snack more than once daily)





TAKING CARE OF YOUR FEET

Why is there so much talk about feet and diabetes ?

Most people with diabetes have no initial trouble with their feet, but progressive damage to the blood vessels and nerves can cause severe problems.

Damage to the blood vessels can cause poor circulation in:

- Large blood vessels in the legs — Ischaemia / peripheral arterial disease
- Small blood vessels in the skin — Peripheral vascular disease causing discolouration and ulcers
- Damage to the nerves can cause a loss of sensation in the feet — pain
- Sensation can be lost so that the feet may not be protected against damage.

You can help yourself to prevent damage to the blood vessels and nerves in your feet by keeping good control of your blood sugar level as set by your doctor, stopping smoking and keeping active.

Should I be putting cream on my feet every day?

Wash your feet daily and be careful to dry

them well — especially between the toes. If your skin is dry use a moisturising cream on your skin daily on your feet. Avoid using it between your toes that can make the skin too moist.

I've recently been given a foot spa and was disappointed to read a caution on the product that it was not suitable for people with diabetes. Is this true?

If you have neuropathy (nerve damage) you definitely should check with your diabetes team before using this. If you don't have neuropathy make sure you check the temperature of the water carefully and don't soak your feet for too long.

Can I still cut my own nails now that I have diabetes?

You may continue to look after your own feet if you have no visual problems of foot damage. If you have 'high risk feet' (your doctor or nurse will examine your feet and tell you if you have), you will need to attend a podiatrist for foot care. For most people with diabetes, they can manage their own nails. File your toenails straight across and not too short.

CASE STUDY

'When I found out I had Type 2 diabetes, I was really shocked'

WHEN Ray O'Toole was too tired to get out of his car one Sunday and go for his customary walk with his family in the Dublin Mountains, he knew something serious was up.

That was 14 years ago but, three years earlier, the Greystones-based dad of two had been given a warning. "I went for a medical for a job and a test showed my urine was high in glucose. I was diagnosed as borderline diabetic," says the now 47-year-old, who is managing director of an insurance company.

"To be honest, I didn't do too much about it. There wasn't that much awareness of diabetes at the time. If I'd known what I do now, I'd have been more careful about my diet. I ate all the wrong foods. I was a chips, burgers, sausage and fry man."

The complete inability to walk in the mountains on that autumn Sunday was just the final straw for Ray who, for almost nine months before, had been feeling poorly. "I'm a very keen golfer and after a game of golf it got to where I'd often have to go to bed for an hour or two. I'd be completely exhausted. I was constantly thirsty, drinking pints of water at a time. That meant I was urinating quite a bit and having to get up in the middle of the night.

"When I found out I had Type 2 diabetes, I was really shocked and upset, especially after the doctor explained the seriousness of it. That night I was afraid to sleep in case I never woke up! ... My grandfather had it but he was dead before I was born. I was in my early 30s at the time and very young to have this.

"I'm absolutely convinced that my being a diabetic is down to diet. Maybe some of it is hereditary but I believe if you eat healthily and keep your weight

under control, you'd be very unlucky to get Type 2 diabetes."

Ray was prescribed medication which he took twice a day. But while he made some changes to his diet, in hindsight he can see he didn't do enough.



"I DIDN'T DO TOO MUCH ABOUT IT ... IF I'D KNOWN THEN WHAT I DO NOW, I WOULD HAVE BEEN MORE CAREFUL"

Two to three years after diagnosis, Ray went on insulin injections. "I was petrified of injecting myself. Now I just do it — it doesn't bother me at all," says Ray, who is on at least four injections a day. Since incorporating the DAFNE approach to treatment into his diabetes care, he feels more in control of things.

"Over the last few years I've had six laser operations on each eye. I eat more fruit and veg. I still play golf, I do a fair bit of walking, I've joined a gym and I'm enjoying being a member of a local camera club. I run a small business and that in itself burns off a lot."

— Helen O'Callaghan



BE ACTIVE — BE HEALTHY

Exercise is the key to good health as it helps to improve fitness, reduces body fat, lowers blood glucose levels and can lower blood pressure by relieving stress.

In this way it also helps to reduce your risk of other conditions such as obesity, heart disease and cancers.

Do exercises you like and enjoy. The human body is like a machine. Food and drink provide the energy to keep the machine going.

If you take in more energy than your body uses, the surplus energy turns into fat and you put on weight. If you need to lose weight you have to use up more energy than you take in. Almost anything you do uses

energy so, you just need to move more. Every little counts, and getting more active will give you more energy, help you sleep better and improve your diabetes control. Being active in the garden is a great way to get exercise and socialise with neighbours.

SIMPLE DAILY WAYS OF INCREASING YOUR ACTIVITY LEVEL

- Going up and down the stairs is one of the easiest ways to get active
- Get up to switch channels on the television
- Move around the room during commercial breaks in TV or radio programmes
- Get off the bus a stop earlier
- Park the car in the most distant part of the car park from where you are going
- Walk to the local shop. Walking is the most accessible and beneficial activity you can do.

It is important to be safe when exercising. Also choose a safe place to walk. You can take a walk on your own or with company, in the rain or sunshine, and most importantly at your own pace.

Talk to your medical practitioner or nurse about the most appropriate exercise for you and how much you should have each day. For the majority of people, 30 minutes of brisk exercise that has you feeling warm but capable of carrying on a conversation is recommended.

The older you are, the more slowly you should start any new activity — every other day for as short a time as three minutes is recommended, adding more days as tolerated and lengthening the time until you reach a goal of 30 minutes.

If the goal is to reduce weight, then you need to build up to an exercise programme of 40 minutes, 3-4 times a week. Determine what you can tolerate, then add between 1-5 minutes (depending on intensity of exercise) each week until you reach your goal.





BENEFITS OF EXERCISE

- Helping you to manage the stresses and strains of life
- Reducing blood pressure
- Reduces the risk of cardiovascular events
- Increased muscular strength and stamina
- The build up of muscle assists weight control
- Blood fats (triglycerides and cholesterol) are lowered
- Self esteem and self image are improved
- Increased sensitivity of the cell receptor site to insulin help to reduce insulin requirement and allows your own insulin supply to work better
- Prolonged regular exercise improves glycaemic control

PRECAUTIONS IN EXERCISING:

- Consult your healthcare professional before making major changes in levels of activity.

- Start slowly if you are not used to exercise
- Get expert medical advice before you begin something new
- Always have some quick acting carbohydrate easily available
- Take special precautions in any activity that you might get into difficulties, eg swimming.

REMEMBER

If your diabetes treatment leaves you at risk of a hypoglycaemic episode, you should check your blood glucose before and after any physical activity. Also you may need to adjust carbohydrate intake and/or reduce insulin dosage.



DIABETES AND YOUR SEX LIFE

If your blood glucose levels are up and down, you will not feel well. This will affect your interest in sex. Sexuality is complex. While many of the factors affecting sexual pleasure are physical, sex also has a psychological dimension. For many people sexual problems are a combination of the physical, the mental and emotional parts of life.

Reduced sexual drive should not be considered a complication of diabetes until other causes are ruled out. This matter should be discussed with any healthcare professional as there are many options available.

DOES IT AFFECT SEX DRIVE?

The impact of diabetes on sexual health and enjoyment is not well-researched. This is particularly the case for women's sexual health.

Common sexual difficulties encountered by women, both those with diabetes and those who do not have diabetes, are:

- poor vaginal lubrication
- a decrease in sexual desire
- pain during sex
- trouble having an orgasm

Women with type 2 diabetes are more likely to have difficulties, as they are older, and are usually taking medications. Ongoing, strict control of blood glucose levels may help prevent these and other problems in later life.

IS THERE A LINK TO ERECTILE DYSFUNCTION?

Erectile dysfunction is the medical term for impotence. It is the persistent inability to get or keep an erection that is hard enough to achieve the quality of sex desired by you and your partner.

Most men will have had problems in getting or maintaining an erection at some point in their lives. Erection problems can be caused by stress, tiredness or too much alcohol.

These reasons are nothing to worry about and many men will experience them, but they can lead to fear of failure. This is when you become so preoccupied with previous failure that you are no longer able to enjoy sexual stimulation to get an erection.

However, in the majority of men, erectile dysfunction is caused by physical (of the body) and psychological (of the mind) reasons. If erectile dysfunction is due to physical problems, the man may have noticed that his erections were getting worse as time went on.

POSSIBLE CAUSES MAY INCLUDE:

- poor blood flow to the penis because of blocked arteries (atherosclerosis)
- too much blood draining from the penis (venous leak)
- damage to the nerves in the penis
- side-effects from certain drugs
- alcohol and drug abuse
- diabetes — poor control increases the risk
- heavy smoking
- high cholesterol
- nervous system problems such as multiple sclerosis or post-stroke
- prostatectomy (surgical removal of the prostate gland)

Men with psychological reasons for erectile dysfunction may still experience 'morning erections.' This means the physical workings behind the erection are fine. Psychological reasons for erectile dysfunction include: stress, worry about performance, emotional trauma, relationship difficulties or confusion over sexual orientation.

WHAT TO DO IF THINGS GO WRONG

1

JUST DO IT: Recognise the problem and decide to do something about it. Ignoring sexual difficulties will not make them go away.

2

SEE YOUR DOCTOR: Describe the problem in plain language. If you feel you cannot discuss your problem with your primary care physician, ask for a referral to another doctor or specialist. You may also get help from your practice or diabetes nurse. They may help you overcome shyness in discussing private matters.

3

CHECK BLOOD SUGAR LEVELS: If your blood glucose levels are up and down, you will not feel well. This will affect your interest in life. Sexuality is complex. While many of the factors affecting sexual pleasure are physical, sex has a psychological dimension. For many people sexual problems are a combination of the physical, mental and emotional.



Don't ignore problems of a sexual nature. Make sure you and/or your partner talk to somebody who can help.



TAKE FIVE

MAKE THE MOST OF YOUR DOCTOR'S VISIT

STEP 1

- Prepare a plan for your visit.
- Set goals for your visit. Think about what you would like to happen during the visit.
- Before you go to the doctor, make a list of your questions and concerns. Put the things that concern you most at the top of the list. This helps to make sure that these concerns get talked about during your visit.
- Remember you need to make the most of your limited time with your doctor.

STEP 2

- Talk about your health concerns. Tell your doctor how you are feeling and about any changes in your health since your last visit. Let the doctor know:

- 1: When the problems started
- 2: What symptoms you have
- 3: How often you have the symptoms

- Giving the doctor clear details of your problem makes it easier for them to help you.

STEP 3

- Ask questions during your visit to help you understand, such as:
- 1: Check with the healthcare professional looking after you to make sure that they understand what you are saying.
 - 2: Ask about your health problems. For example, how to take your medicine and how to make changes in your life. Let your doctor know if you don't understand something.
 - 3: Use your own words to describe what you think your doctor is telling you to do. This helps to make sure you understand what your doctor is saying. It also helps you to remember what you need to do after you leave the surgery or clinic.

STEP 4

- Problem-solve with your healthcare professional.
- Tell your doctor about things in your life, like stress, work or money problems, that make it hard for you to take care of your health. For example, if you hate exercising and don't have the money to join a gym, try problem-solving. Together, you may be able to come up with a different plan to suit you. For example, if you need to get fit, you might get good exercise working in your garden or walking your dog which won't cost you anything and you might enjoy it.
- Write down some of the ideas you and your doctor talk about that may help you make the changes.
- Let your doctor know if you still have concerns and worries before you leave the surgery or clinic.

STEP 5

- End your visit by going over what you have talked about and what you will do.
- Repeat in your own words what you understood from your talk with your doctor. Describe what both of you talked about, what you will do after the visit and when you need to come back.
- Let your doctor know that you like having the chance to talk about your concerns and that you appreciate it when they listen. Also, tell your doctor that you want to keep working together so you have more control over managing your health.

REMEMBER: Before providing details of your problem, make sure you prepare a plan and make a list of questions and concerns.

CASE STUDY

'This train [type 2 diabetes] was coming down the track and I had notice of it'

NOBODY would have expected Tom Donnelly to be a candidate for heart disease, let alone type 2 diabetes.

The 73-year-old from Youghal, Co Cork, was very active throughout his life. "I played every sport imaginable — hurling, football, soccer, squash. You name it, I dabbled in it. I was the last person people expected to need a heart bypass."

Tom had his bypass 15 years ago and, as a result, was having his blood levels monitored every six months. "Six years ago, my doctor started to notice my blood sugar level was rising. I had no signs or symptoms of diabetes — he just mentioned we'd have to keep an eye on things. This train — type 2 diabetes — was coming down the track and I had notice of it."

Tom, who worked in Youghal Carpets, was finally diagnosed at the end of 2005.

Having type 2 diabetes doesn't affect him in "a major way" but he's conscious of it all the time. "I get my blood checked every four months. Every day, my target is that my next blood check will be good. I abide by the four Fs — fowl, fish, fruit, fitness."

Tom prefers to walk on the treadmill in the gym than on any of the nearby beaches. "I don't like walking in the wind. At the gym, I set my pace and incline and I know exactly where I should be. About 12 months ago, I noticed my stamina was dropping back. That was an indication my arteries were closing in again so I had stents inserted six months ago. Now, in terms of fitness, I'm back to what I was previously.

Despite being on medication, he says



he feels great. "I feel top class. I'm careful to have small regular meals. I don't let more than five hours go between meals." But his type 2 diabetes makes its presence felt in other ways. "From September to April my hands and feet are cold. Before I got diabetes I could warm them in two or three minutes. Now I have to gradually warm them up over a period of maybe 25 minutes.

"I'm fairly concerned about my feet. I get them — and my eyes — checked three times a year. Before getting diabetes if I had a blister on my foot I'd put disinfectant on it. A few weeks ago I got a nail through my shoe. I went straight to my doctor. I know if I neglected something like that — with poor circulation — there's no going back. The next step would be amputation."

— Helen O'Callaghan

Diabetes™ WE'RE HERE Ireland TO HELP YOU



DIABETES HELPLINE
1850 909 909
info@diabetes.ie www.diabetes.ie

DUBLIN OFFICE

76 Lower Gardiner Street
Dublin 1
Phone: 01 8363022
Email: info@diabetes.ie
Office Hours: Mon to Fri
9.00 am – 5.00 pm

WESTERN OFFICE

1 Wine Street, Sligo Town
Phone: 071 914 6001
Email: wro@diabetes.ie
Office Hours: Mon to Fri
9.30am - 1.30pm

SOUTHERN OFFICE

32 Grand Parade, Cork City
Phone: 021 427 4229
Email: sro@diabetes.ie
Office Hours: Mon to Fri
9.30am - 1.30pm

WE'RE STRIVING TO MAKE DIABETES HISTORY.



DIAB-1016645-0000
08-15-6EV-2010-IRL-3512-J

At MSD, we work hard to provide people with diabetes all around the globe with innovative medicines and healthcare solutions that make a difference. On behalf of all people living with this disease we are working to make diabetes history.

MSD is the world's second largest pharmaceutical company and employs 2,300 people at operations in Carlow, Cork, Dublin, Tipperary and Wicklow. In the last four decades we have invested over €2.2bn in Ireland and our investment continues to grow, making MSD one of Ireland's leading exporters both now and in the future.

See all we're doing at www.msd.ie

Not just healthcare.

HUMANCARE



MSD Dedicated to Diabetes



guaranteed irish™
promoting irish excellence