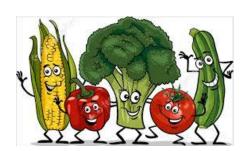
DIABETES INFORMATION PACK



Thank you for picking up your Diabetes Information Pack.

This information pack has been provided by your doctor's surgery to help you with your diagnosis of <u>Diabetes.</u>

This pack is to be used by patients and their families to understand what Diabetes is and what you need to know.

This is provided to support your care and allow you to answer some of the basic questions a new diagnosis of Diabetes may bring.

As part of the ongoing care here at Tamworth House Medical Centre initially you may need several blood tests and investigations to establish the course of management most suitable for you as an individual. Your doctor here at the surgery will endeavour to help you with this.

We hope you find this helpful.

Well controlled diabetes will give you reduced risks of complications and improve your health and quality of life.

We also recommend that you have an **ANNUAL BLOOD TEST AND DIABETIC REVIEW** to monitor your condition.

On behalf of Tamworth House Medical Centre

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WHAT IS DIABETES?

Diabetes is a lifelong condition that causes a person's blood sugar level to become too high.

The two main types of Diabetes are:

- Type 1 Diabetes
- Type 2 Diabetes

In the UK diabetes affects approximately 2.9 million people. There are also thought to be around 850,000 people with undiagnosed Diabetes.

Main Symptoms of Diabetes

- Feeling very thirsty
- Urinating frequently, particularly at night
- Feeling very tired
- Weight loss and loss of muscle bulk

Type 1 Diabetes can develop quickly, over weeks or even days.

Many People can have Type 2 Diabetes for years without realising because early symptoms tend to be general.

What Causes Diabetes?

The amount of sugar in the blood is usually controlled by a hormone called insulin, which is produced by the pancreas (a gland behind the stomach).

When food is digested and enters your bloodstream, insulin moves glucose out of the blood and into the cells, where it is broken down to produce energy.

However if you have Diabetes your body is unable to break down glucose into energy. This is because there is either not enough insulin to move the glucose or the insulin produced does not work properly.

Type 1 Diabetes

In Type 1 Diabetes the body's immune system attacks and destroys the cells that produce insulin. As no insulin is produced, your glucose levels increase which can seriously damage the body's organs.

Type 1 Diabetes is often known as Insulin Dependent Diabetes. It is also sometimes known as Juvenile Diabetes or Early-Onset Diabetes because it usually develops before the age of 40 often during teenage years.

Type 1 Diabetes is less common that Type 2 Diabetes. About 10% of all people with Diabetes have Type 1 Diabetes.

If you are diagnosed with Type 1 Diabetes you will need insulin injections for the rest or your life. You will also need to pay special attention to certain aspects of tour lifestyle and health to ensure your blood glucose levels stay balanced – for example by eating a healthy diet and carrying out regular blood tests.



One in 15 people in the UK have diabetes, including one million people who have Type 2, but haven't been diagnosed.

Type 2 Diabetes

Type 2 Diabetes is where the body does not produce enough insulin or the body's cells do not react to insulin. This is known as insulin resistance.

Type 2 Diabetes is far more common than Type 1 Diabetes. In the UK around 90% of all adults with Diabetes have Type 2 Diabetes.

If you are diagnosed with Type 2 Diabetes you may be able to control your symptoms simply by eating a healthy diet and monitoring your blood glucose level. However as Type 2 Diabetes is a progressive condition you may eventually need medication usually in the form of tablets.

Type 2 Diabetes is often associated with **Obesity.** Obesity related Diabetes is sometimes referred to as Maturity-Onset Diabetes because it's more common in older people.



In the UK there is no special diet for people with Diabetes

A healthy Diabetic diet should include the principles of healthy eating with a focus on foods that help keep Diabetes under control.

The diet advice that is generally given out by NHS is to include starchy carbohydrates with each meal, eat more fruit and vegetables, to eat at least 2 portions of oily fish and to cut down on saturated fat, salts and sugars.

All the foods we eat affect the blood glucose levels but as a general guide a diet that includes a good variety of healthy food types is a good start and the more dense or fibrous the food the slower it dissolves and allows the body to process sugars.

- Eat regular meals and healthy snacks
- Don't miss breakfast
- Don't skip meals
- Avoid all unhealthy/hydrogenated fats (fried foods and take away)
- Choose low-fat dairy products
- Check food labels
- Choose lean meat and remove fat and skin
- Avoid high sugar foods such as cakes, biscuits and sweets
- Keep hydrated and avoid binge-drinking

MOVING MORE

It could be an activity class, a sport, or it could be getting up from your seat and doing more around the house. Even moving a little more makes a big difference.

Moving more each day will help you lose weight and help to maintain a healthy weight.

Moving more will also help you to:

- reduce your waist size
- reduce blood pressure
- manage stress and help you sleep.

How much activity?

You should aim to do 30 minutes of moderate activity, five days a week. Or 15 minutes of vigorous activity five days a week.

- Moderate activity means your breathing is increased, but you're still able to talk. Its things like walking quickly, cycling on flat ground or a leisurely swim.
- Vigorous activity means your breathing is fast and you have difficulty talking. Its things like running, cycling fast or up hills, or fast swimming.

You should also try to fit in activities that improve your muscle strength two or more days a week. That's things like heavy gardening, carrying the shopping or a bit of yoga.

We know this can be a big challenge. So, break the time into smaller chunks and build up to this amount. Walking can be a great way to start and it's something you can build into your everyday routine – it's also free.

Think about taking the stairs instead of the lift, get off the bus a stop earlier, or join a walking group.

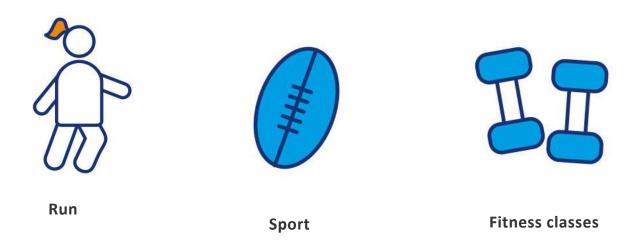
GET UP AND MOVE

Here are some exercises you can do to get active:

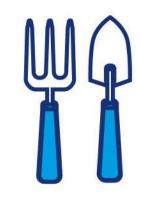
Get active with moderate exercises



Get active with vigorous exercise



Improve muscle strength







Heavy gardening

Carrying groceries

Yoga

Where to start?

Being more active often conjures up images of gym memberships, long-distance runs and intense aerobics. But the great news is that you can become more active by making small changes to your lifestyle – you can fit it around your daily life, in your budget. Follow our three top tips to help make your life more active:

1. Set clear goals to move more

Setting goals can help you break down what you need to do and how to do it. Keep an activity diary to see how active you are at the moment and use it to gradually increase your activity levels. Our action plan can help you set some goals.

2. Plan ahead

We all have busy lives, so try to plan what activity you're going to do this week and fit it around your social life. You could fit something in during your lunch hour or go for a walk to catch up with friends.

It's a good idea to think about anything that might stop you from doing what you've planned, like bad weather, and having plan B ready just in case.

3. Start by making small changes

It's time to put your plan into action. Start small and do something you enjoy. Doing just a little bit more each day will still make a difference. It also means you're more likely to stick to it and the change won't be such a shock to your daily routine.

Each healthy choice you make is helping you to achieve your goal. If you find it hard, don't give up – start again tomorrow.

Get support

You're not alone in this. Ask at your GP surgery about local services to help you move more. Here are some handy tools to help you get moving:

- Get running in no time with the Couch to 5K app.
- Up your game with this 12 week fitness plan.
- Don't have much time? Even 10 minutes of brisk walking can make a big difference to your health get started with Active 10.

Getting active with others can often give you that extra bit of motivation you need. Whether that's friends and family, or a local walking group. You could even sign up to one of Diabetes UK fundraising events together, like Swim22 or take on Diabetes UK 1 million Step Challenge.

EATING BETTER

It isn't always easy to get portion sizes right, and it can make managing your weight and blood glucose levels more difficult. It's good to stay clued up on carb portion sizes. We've created a guide with some tips and tricks to help you along the way.

Getting your portion sizes right

Using everyday items and household utensils to get your portion sizes right can be really useful. It's an easy way to visualise what a portion should look like.

We've produced portion-size guides for popular foods from the five food groups that help to make up a healthy, balanced diet.

Remember, everybody's needs are different so the number of portion sizes you need is individual – and your weight, gender, body composition and activity levels all make a difference. Your dietitian will be able to advise you on the amount of portions that are right for you.

Starchy food

Includes rice, pasta, bread and chapattis for energy. Choose wholegrain where possible. One portion is:

- Cooked rice = 2 heaped tablespoons
- Half a jacket potato = 1 computer mouse
- Breakfast cereal = 3 tablespoons
- Boiled pasta or cooked noodles = 3 heaped tablespoons

Dairy food

Includes milk, cheese and yoghurt for calcium, which is essential for strong bones and teeth. One portion is:

- Semi or skimmed milk = one medium glass (200ml or 1/3 pint)
- Hard cheese = small matchbox (30g)

- Reduced or low-fat cream cheese = two small matchboxes (60g)
- Low-sugar, low-fat fromage frais/yoghurt = 125g pot

Meat, fish, eggs, pulses, beans and nuts

These foods are high in protein, essential to build and replace muscle. One portion is:

- Cooked lean meat (eg chicken, beef or pork) = deck of playing cards (60–90g)
- Beans and pulses (eg red kidney beans, butter beans, chickpeas or lentils) = 4 tablespoons
- Nuts or peanut butter (unsalted) = golf ball (2 level tablespoons)
- Quorn, tofu or soya = snooker ball (120g)

Fruit

Provides you with important vitamins, minerals and fibre that help protect you against stroke, high blood pressure, heart disease and certain cancers. Part of your five-a-day plan. One portion is:

- One handful of grapes
- One small glass (150ml) of fruit juice (limit to one portion a day)
- Two small satsumas, clementines or tangerines
- Two medium plums
- Two tinned pineapple rings or 12 chunks in natural juice
- One heaped tbsp raisins, sultanas, currants or dried cranberries
- Seven strawberries

Vegetables

An important source of fibre, minerals and vitamins, and an important part of any five-a-day plan. One portion is:

- Three heaped tablespoons cooked veg (eg carrots, peas, sweetcorn, mixed veg)
- One medium onion
- One large sweet potato

- Two broccoli spears
- One heaped tablespoon tomato purée
- One piece of cucumber (5cm)
- Four large mushrooms or 14 button mushrooms
- Three heaped tablespoons beans or pulses (eg kidney beans, chickpeas or lentils)

Foods high in fat and sugar

You can enjoy foods from this group as an occasional treat, but they will add extra calories so it's best to keep them to a minimum, especially if you are trying to lose weight. One portion is:

- Butter/margarine = one dice (5g)
- Low fat spread = two dice (10g)
- Unsaturated oil (eg sunflower, rapeseed, olive oil) = 1 teaspoon
- Chocolate = one fun size bar

Top tips for managing portion sizes

- Use smaller plates and bowls to help make your portion sizes look bigger.
- Weigh food if you find it hard to gauge portion sizes. Foods like muesli, pasta and rice
 can be difficult to get right at first, so try using the same container to measure out
 certain foods.
- Be mindful of what you're eating. It takes about 20 minutes before your brain registers that you're full, so eat slowly, putting your knife and fork down in between mouthfuls.

HEALTHY FOOD SWAPS

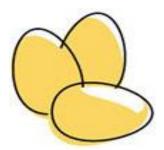


Many hands make light work – that's certainly true when preparing food.

Cooking and eating together as a family does more than help you eat a healthy, balanced diet. It also helps you learn cookery skills that last a lifetime, whilst having fun with food.

You can always make what you eat that little bit healthier without losing out on flavour. Try some healthy swaps for meals, snacks and occasions and you'll notice the difference.

A healthy, satisfying breakfast can make a big difference. But some traditional breakfast foods are packed with sugar and fats. We've come up with some simple swaps so you can take charge of your diabetes and ensure you start your day the right way.



Breakfast



Cereal switches

Although the packaging may make some cereals - like granola and cereal clusters - appear healthy, they are often full of sugar and fat. Instead, why not switch to porridge? Porridge oats or the instant variety are both fine - just avoid those with added sugar, honey, golden syrup or cocoa powder. Wheat biscuits, shredded wheat or muesli (with no added sugar) are also great alternatives. For sweetness, add chopped fruit.

Yogurt can be a tasty alternative to cereal, but many low-fat yogurts are high in sugar. So why not try making your own flavoured yogurt? Buy low-fat plain, Greek natural yogurt, or fromage frais. You can add fresh fruit and a few nuts, or seeds for some extra flavour.

Quick breakfast tips:

- Switch from white toast to wholegrain versions like seeded batch bread, multi-seed, granary, soya and linseed. These are better for your diabetes and digestive health. They're more filling, too.
- If you're making rotis and chapattis, use wholewheat flour.
- Instead of jam, try pure spreader, mashed banana. Other healthy choices are low-fat cheese, cottage cheese with a couple of fresh chopped dates, or almond butter and chopped banana
- Try to keep croissants, pastries and muffins as an occasional treat. Even skinny muffins are high in sugar and fat.
- Use as little oil as possible when cooking. Cook with unsaturated vegetable oils, such as sunflower, olive or rapeseed, instead of butter or ghee.

- Add extra fruit and veg to bump up your fibre intake wherever you can. Add half a banana to your cereal, or grilled tomatoes to a fried breakfast.
- Choose roasted mudhi or chuda (puffed rice) with vegetables, instead of chudha upma with oil.
- Try dry roasted methi paratha instead of aloo paratha.
- Try rice, besan or oat cheela with dry fried vegetables.



Savoury breakfasts

If you prefer a savoury breakfast, grilling instead of frying bacon and sausages cuts down on calories and fat. Try and avoid red meat and instead use oily fish such as heart-protecting salmon or kippers. They're delicious served with scrambled egg, grilled tomatoes, mushrooms and wholegrain toast.

You could also try topping wholegrain toast with scrambled egg or egg bhurji, avocado, cottage cheese with edamame beans and tomatoes, or grilled tomatoes and mushrooms.

Lunch



With a little planning you can look forward to your packed lunches and enjoy a tasty, nutritious meal rather than a dried out sandwich. By choosing something from the four main food groups at each meal you can be sure your meals are healthy and well balanced.

- starchy carbs (bread, pasta, rice, potatoes)
- fruit and veg
- protein-containing food (lean meat, fish, eggs and beans)
- milk and dairy food (low-fat yogurts).

Lunches on the go

Whether you take your lunch to work or eat on the go, here are some top swaps and ideas for healthy, balanced lunches.

- Swap a canned drink for a diet version and save around six tsp sugar.
- Cut back on fat by choosing baked crisps as a healthier alternative to fried.
- Choose a two-finger chocolate wafer biscuit, rather than a standard chocolate bar, and save on both fat and calories.
- Try a ham salad sandwich instead of a club sandwich to save 135Kcal and 16g of fat.
 Make your own and cut out even more fat by using less spread.
- Open sandwiches reduce calories and fat by using half the amount of bread.
- Pop a variety of breads in the freezer so you can vary your lunchtime meals. Bulk out wraps, bagels and sandwiches with salad veg. To add crunch, add a few chopped nuts or seeds.

- Pack a few bread sticks, carrot batons, sticks of cucumber, peppers and reduced-fat hummus for a tasty snack. That way you won't be tempted to reach for the office biscuits.
- Fruit is always a good idea for desserts. Try different types to add variety to your lunch. Bring in a few and keep on your desk to help you meet your five a day.
- As an occasional treat malt loaf, a slice of fruit loaf, scone or teacake could be enjoyed
 particularly if you know you will be active and do not need to lose weight. These are
 healthier options compared to chocolate, biscuits and sweets. However if you want to
 lose weight take into account the extra calories they contain and adjust your diet
 during the rest of your day accordingly.

South Asian ideas

Try these simple swaps for a healthier lunch.

- Choose brown basmati rice instead of pilau or fried rice.
- Stir-fry vegetables instead of cooking them in an oily curry.
- Whichever type of dhal or beans you cook, it's healthier if you cook them in a little bit of oil that's high in unsaturated fat such as olive, sunflower or rapeseed oil instead of cooking it in a lot of oil or ghee.
- Make khichdi with less rice and more mung and add as little oil or ghee as possible.
- Measure out small amounts of oils high in unsaturated fat instead of ghee when
 making dough for rotis or leave out the fat altogether. Olive, sunflower and rapeseed
 oils are good choices.
- Use a vegetable-based spread on top of rotis instead of butter or ghee, and try spreading it on alternate ones only to cut back on the amount of fat you use.
- Keep butter off the table, so you're not tempted to add extra fat to daals, subjis, chapattis or parathas.

Snacks



Everyone needs a snack in between meals occasionally – but, if you have diabetes, you'll want something small that will satisfy your hunger, is low in fat and sugar, and will not have a big effect on your blood glucose level.

If you're bored with the same old snacks, here are some quick and easy ideas you can put together from ingredients you have at home or can buy easily. They also don't need any cooking.

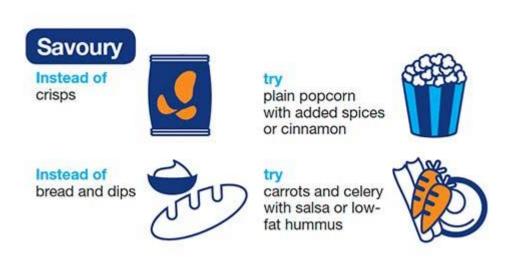
We've divided them into snacks under 10g carbs and those containing 50, 100 and 150 calories.

If you're trying to lose weight, opt for the snacks with the least amount of calories.

Snack guidance

We don't recommend snacks labelled 'diabetic', which tend to be expensive and don't offer you any special health benefits. The key is to plan your favourite snacks, so they fit into your overall diet and watch your portion sizes.

Swapping is an easy way to eat better while still enjoying the foods you like. Here's a few ideas to try to get you started.







Snacks under 50 calories

1 small apple: 38 calories

2 satsumas: 50 calories

4 heaped tbsp blueberries: 44 calories

1 handful of grapes: 45 calories

• 1 kiwi fruit: 42 calories

1 peach: 30 calories

3 rings pineapple: 50 calories

• 1 light cheese triangle (25 calories) and 8 cherry tomatoes (24 calories): 49 calories

• 30g ready-to-eat partially rehydrated prunes: 48 calories

- 1 rice cake (27 calories) and 1 teaspoon (10g) pure fruit spread (22 calories): 49 calories
- 1 x 14g mini box of raisins: 45 calories
- 1 lighter cheese slice (34 calories) with 1/4 cucumber (11 calories): 45 calories
- 1 x 115g pot sugar-free jelly: 8 calories

Snacks under 100 calories

- 4 bread sticks: 92 calories
- 80g defrosted frozen cherries (38 calories) with 50g 0% fat Greek-style yogurt (55 calories) whizzed together with ice: 93 calories
- 10 almonds: 69 calories
- 100g carrot batons (42 calories), ¼ cucumber (11 calories) and 50g (¼ pot of 200g pot) salsa (27 calories): 80 calories
- Half a pot (300g) of shop-bought fresh tomato soup: 93 calories

Snacks under 150 calories

- 1 tsp (15g) almond butter (97 calories) spread onto slices of a chopped apple (50 calories): 147 calories
- 100g 0% fat Greek-style yogurt (57 calories) plus 100g blueberries (68 calories): 125 calories
- 4 small (9g) crispbreads (108 calories) and 60g 0% fat cottage cheese (39 calories) and): 147 calories
- 25g toasted seed mix: 132 calories
- 1 (25g) slice Edam cheese (78 calories) and 1 apple (50 calories): 128 calories
- 2 small crispbreads (78 calories) and 1 x (30g) slice chicken breast (38 calories): 116 calories
- 25g raisin, nut, goji berry and seed mix: 124 calories
- 2 rice cakes (54 calories) and ¼ pot (50g) tzatziki dip (61 calories): 115 calories

UNDERSTANDING FOOD LABELS



If you buy pre-packed foods and drinks, deciphering the information on the labels can help you make healthier choices that will help you and your family to eat well.

Labels on foods and drinks give essential information, such as:

- the ingredients
- the nutrients (such as fats, calories, fibre)
- how much they contribute to what an average adult needs each day.

On the back

Information on the back of a pack is compulsory and gives details about the ingredients, nutritional composition, known allergens, 'best before' or 'use-by' dates and the weight of the product. The ingredients are listed in order, starting with the highest-quantity ingredient first, down to the lowest- quantity ingredient last. So, if you find sugar at the top of the list, the food is likely to be high in sugar.

On the front

The traffic light system for 'front of pack' labeling, while still voluntary, has been around for a while now and is an easy way to check at a glance how healthy a food is. The labels show

how many calories are in the food or drink and are also colour coded to show whether the food is low (green), medium (amber) or high (red) in fat, saturated fat, sugar and salt. The information on the front of the pack also tells you how the portion of the food contributes to the Reference Intake (RI) of an adult. Try to choose foods with more greens and ambers and fewer reds. And, if the traffic lights aren't available, check the 'per 100g' column on the 'back of pack' nutritional label.

Note: portion size criteria apply to portions/serving sizes greater than 100g

This table shows the cut-offs for what is considered as low (green), medium (amber) and high (red). Whether a food is green, amber or red is decided by the amount of fats, sugars or salt in 100g of the food. If the portion of the food is bigger than 100g, then the per portion cut-offs for high (red) are used. The per portion criteria does not apply to the green and amber colour coding. The table only applies to solid foods because liquids have lower cut-offs.

Why aren't carbs included on the 'front of pack' label?

The 'front of pack' labelling is voluntary and only an addition to the 'back of pack' labelling, which is mandatory. Diabetes UK and other organisations campaigned for supermarkets and food manufacturers to have clear consistent information on the front of pre-packaged food. The objective of this campaign was to make it easier for people to make informed choices based on how healthy a particular food is.

The information included in the 'front of pack' labelling is meant to help people, at a glance, quickly decide which foods are healthier based on the amounts of fats, sugars and salt. These nutrients are colour coded based on EU set criteria for low, medium and high amounts. Carbohydrates are not included in the 'front of pack' information partly because there is no set criteria for determining what the amount of low, medium or high carb is in a particular food.

The 'back of pack' labelling provides detailed information on other nutrients including carbohydrates. These are expressed in per 100g so that people can easily compare two similar products. In addition to the per 100g info, many products also provide nutrient

contents in per portions so this can be useful for people who want to know the amount of carb they are eating.

Portion size

A manufacturer's definition of a portion or serving size may be different from yours. In general, the portion sizes given are suitable for adults over the age of 18. Younger children and teenagers may need different amounts. Even with healthier choices, if you eat large portions you may end up consuming more calories, fats and sugars than you need. How much you eat of any food influences your nutrient and calorie intake, so think about the portion size when you're buying food and don't always eat the amount the manufacturer recommends if you think you need less.

What else?

Many of the claims made on food packaging, such as fat free or low fat, can be confusing. Here's the difference:

- Fat free: has to have no fat, but check the ingredients list for added sugar, which are often used to replace the fat.
- Sugar free: check the ingredients list for fats which may replace the sugar.
- Low fat: the product has 3g or less of fat per 100g.
- Low sugar: has less than 5g of sugar per 100g.
- No added sugar: although no sugar is added, there may be naturally occurring sugar in the food.
- Reduced fat or sugar: contains at least 30 per cent less fat or sugar than the standard version of the product. This doesn't necessarily mean it's healthy and in some cases the lite version of, say, crisps, can contain the same amount of calories and fat as the standard version of another brand.

And if there's no nutritional info?

Not everything you buy will have nutritional information, but that doesn't mean the rest of the pack doesn't give you clues to help you make a healthier choice. It's important to check

the ingredients list or back of pack label so you can compare two products like for like per 100g.

6 ways to be label savvy

Follow these tips to become expert at deciphering labels in minutes:

- 1. With traffic light labels, go for green, occasionally amber, and red only as a treat.
- 2. Reference intake (RI) percentages are given per portion, and indicate how much the portion contributes to the amount of calories, fat, sugars and salt an average adult should have each day. Check how much of the pack counts as a portion to avoid consuming more calories, fat and sugar than you need.
- 3. All carbohydrates raise blood glucose levels. Labels on the front don't include the amount of carbs, so check the label on the pack for the total carbohydrate, which includes carbohydrates from starchy food as well as sugars.
- 4. The figures for sugars on traffic lights are for total sugars, which doesn't tell you how much of the sugar comes from natural sources, such as fructose and how much is added, such as sucrose or glucose. Check the ingredients list if syrup, invert syrup, cane sugar, molasses or anything ending in 'ose' is within the first three ingredients, this suggests the food contains more added sugar. Choose an alternative if possible, or be mindful of the portion you eat.
- 5. Check the **fibre** content on the back of pack label. If you're choosing between two similar products and one has more fibre, choose that, as we should all be consuming more fibre as part of our daily diet.
- 6. Check the manufacturer's definition of a portion size. It may differ from yours and be smaller than you would like! However, if you are trying to lose weight or maintain a healthy weight, it's a good idea to reduce your portions.



DRIVING AND DIABETES

Most people with diabetes can hold a driving licence and can carry on driving. Here you'll find everything you need to know about driving if you have diabetes.

How Diabetes Can Affect Driving

There are two main things about diabetes that can affect your ability to drive safely:

- If you have Diabetes it means you're at risk of having a hypo (where your blood sugar drops below 4mmol/l).
- If you develop diabetes complications that make it harder for you to drive like problems with your eyes (retinopathy) or nerve damage (neuropathy).

If these things affect you, you need to know what the rules are and what you need to tell your local driver and licensing authority.

The rules are different depending on what vehicle you want to drive.

Here we'll talk mainly about what you need to know if you want to drive a car or motorbike (called a Group 1 License).

To drive a lorry or larger vehicle, you'll need a Group 2 License. There are different rules for this type of license, and they can be more complicated when you have diabetes.

These rules come from the Driver and Vehicle Licensing Agency (DVLA) in England, Scotland and Wales, and the Driver and Vehicle Agency (DVA) in Northern Ireland. We use **DVLA** throughout this information, to make things simpler.

And remember, you need to know these rules if these things could affect you in the future if not now.

Driving & How You Treat your Diabetes

Not everyone with diabetes is at risk of having hypos. It can affect people who take certain medication to treat their Diabetes, including **insulin** and medications like **sulphonylureas**. Speak to your healthcare team if you're not sure whether you're at risk of having them and what you can do to prevent them. Follow the checklist if you're at risk of hypos.

If you don't take any medication at all to treat your diabetes, you don't need to tell the DVLA anything right now.

The exception is if you're taking temporary insulin. Some people take it for a short time after an operation, or for **Gestational Diabetes**. If that's the case for you, then you don't need to let the DVLA know but your healthcare team must tell you when you can go back to driving. Check out the rules for your driving license when you're on temporary insulin.

Driving & Eye Complications

Retinopathy is damage to the blood vessels supplying the eye's retina (the seeing part at the back of the eye) and it can cause sight loss. It's linked to high blood sugars and high blood pressure so it's more common in people with diabetes.

If you start having problems with your eyes, you need to let the DVLA know and you may need a **Special Eye Test**. It'll be done at an optician near you that's recommended by the DVLA and they'll pay for it.

Some eye problems can be treated successfully which means you can reapply for your licence. Ask your healthcare team if you're not sure.

Other Diabetes Complications That Can Affect Driving

Neuropathy affects your nerves. Damage to your nerves can mean you lose feeling in your hands and feet, as well as causing problems in various other parts of your body. If it's severe then you should ask your healthcare team or the DVLA for more advice.

If neuropathy or an amputation mean you need an adapted vehicle, you'll have to apply for an adapted vehicle licence from the DVLA.

Heart Complications can affect your ability to drive and being able to hold a licence. Your specialist heart team must advise you here.

Other conditions the DVLA need to know about include things that could cause loss of consciousness or concentration, like **sleep apnoea**. This can make it harder for you to concentrate in the day due to extreme sleepiness. Talk to your healthcare team or sleep clinic about this.

They also need to know about any problems you develop that make it difficult to negotiate traffic or act quickly. For example, a **Stroke**, which is a cardiovascular complication, is when blood can't get to the brain and it's starved of vital oxygen and nutrients. This can happen if your blood vessels are damaged or blocked and can make it harder for you to react quickly.

Car Insurance & Diabetes

Most car insurance companies won't charge more if you have diabetes. You should complain if they do and if you're still not happy then try somewhere else.

You'll have to declare your diabetes as a material fact when applying for insurance. We've information about insurance and diabetes to help you.

Your Driving Checklist If You're At Risk of Hypos

Follow this checklist each and every time you drive. It's how you reduce your risk of a hypo at the wheel. And it's how you can carry on driving safely.



- Know the symptoms of a hypo if you've lost hypo awareness, you can't drive.
- Keep spare test strips in the car and bring your meter with you.
- Check your blood sugar levels before you set off and every two hours on long journeys.
- Five to drive your blood sugars must be 5mmol/l or above before you drive. If they're just under 5mmol/l, eat some carbs before heading out.
- If they're under 4mmol/I treat your hypo and check your levels again before driving.
- Always keep hypo treatments where you can easily reach them in the car.
- Take breaks on long journeys.
- Don't delay meals or snacks.

Remember, the rules are more complicated if you want to drive a large vehicle, with a Group 2 License.

When to Check Blood Sugar Levels for Driving

If you usually check your blood sugar levels, then you must follow the rules about when to check them.

This means checking them within two hours of driving – however short the trip. On longer journeys, you must check them every two hours.

You can use a flash glucose monitor to check your sugar levels before you drive. These rules recently changed, meaning drivers with diabetes now have more choice in how they check their sugar levels.

The rules are only about low blood sugar levels, the DVLA don't have any specific limits on high blood sugar levels.

Speak to your healthcare team if you're not sure whether you should be checking your blood sugars – it depends what medication you're on.

If You Start Having a Hypo While Driving

It's the law that you must stop. And it's what you must do to avoid any risk of an accident. So find somewhere safe to pull in as soon as possible.



1. Pull over safely. If you feel like your blood sugar is low, then make sure you pull over as soon as possible.

- 2. Switch off the engine. Take the keys out and move from the driver's seat if you don't, the police can think you're still in charge of the car and you could be prosecuted.
- 3. Take fast-acting carbs, like glucose tablets or sweets, and some longer-acting carbohydrates too, like plain biscuits or crackers.
- 4. Don't drive until 45 minutes after your blood sugar level has gone back to 5mmol/l or above. This is the time it takes for your concentration to go back to normal.

If you're struggling with hypos, talk to your healthcare team about whether you should be driving.

You don't need to let the DVLA know that you've had a hypo – only if it's a **Severe Hypo**.

A **Severe Hypo** is one where you need help and can't treat it on your own. This is different from having a regular hypo.

More than one severe hypo while awake (when you're not driving)

If you have more than one severe hypo while awake in 12 months you must stop driving and tell the DVLA. Your licence will be revoked but you can apply again after three months. See your healthcare team to get their advice on your diabetes treatment and management to cut down the risk of this happening again.

To be clear, this is about more than one severe hypo when you're not driving. If you have even one severe hypo while driving, you must stop driving and tell the DVLA straight away.

A severe hypo while sleeping

The law about severe hypos while sleeping changed for Group 1 licences (cars, motorbikes) after we campaigned for the DVLA to recognise they aren't a risk for driving. You can't take the same steps to treat them that you can when you're awake, so it wasn't fair.

The DVLA now say you don't need to tell them if you have a severe hypo while you're asleep.

It isn't the same for Group 2 Licenses (for large vehicles and lorries). You can't drive with a Group 2 licence if you don't have full hypo awareness or you've had one severe hypo in the last year. If you have a severe hypo at any time, you must stop driving and tell the DVLA.

ALCOHOL AND DIABETES

Most people enjoy the occasional alcoholic drink whether it be a glass of wine with a meal, a celebratory glass of champagne or a pint with friends at the pub.

The good news is as a general rule there is no need to give up alcohol just because you have Diabetes. Guidelines are in line with the rest of the population of a daily recommendation of two units for women and three units for men (maximum weekly amount of 14 units for women and 21 units for men).

One unit is approximately:

- ½ pint of ordinary strength beer, lager or cider
- 1 pub measure (50ml) of sherry or vermouth
- 1 small glass of wine (125ml)
- 1 pub measure of spirit (25ml), eg gin, vodka or whisky

Be aware that the alcoholic strengths of drinks can vary considerably, with many drinks having increased in alcohol content over the years. Your drink may contain more units than you think. To accurately work out how the number of units in your drink the following equation can be applied

<u>ABV x volume</u> = number of units 1000

For example, by using the above equation we can calculate that a pint of lager (568ml) which has the alcoholic strength of 5.2% ABV will contain three units.

- Alcohol makes hypoglycaemia (low blood glucose levels) more likely to occur. However as long as your Diabetes is well controlled moderate amounts of alcohol in line with the above daily guidelines can be drunk before, during or soon after a meal without affecting shortterm blood glucose control.
- Never drink on an 'empty stomach' as the alcohol will be absorbed too quickly into your blood stream.

- Do not substitute alcoholic drinks for your usual meal or snacks as this may lead to a hypo (hypoglycaemia).
- Serious hypoglycaemia can occur with larger quantities of alcohol, particularly if you are treated with insulin and especially if too little carbohydrate is eaten. If this could apply to you always make sure you take some carbohydrate before you go to bed after drinking. Useful snacks include toast, cereal and sandwiches although chips or pizza on the way home may be an easier albeit unhealthier option.
- If you are at risk of hyops it's worth noting that it may occur up to 16 hours after heavy drinking. It is vital you keep your blood glucose levels topped up with carbohydrate and always remember to take something at breakfast. Monitor your blood glucose levels closely.
- Remember you may be less aware of hypos symptoms when you are drinking so always wear some form of **Diabetes Identification** as you and others may confuse a hypo with drunkenness.
- Continuous heavy drinking can lead to raised blood pressure in all of us, so again try to limit your intake.
- All types of alcoholic drinks contain calories and can make you feel hungrier, so if you are watching your weight try to limit your intake to the occasional drink.
- If you have neuropathy (nerve damage) drinking alcohol can make it worse and increase the pain, tingling, numbness and other symptoms associated with nerve damage.
- Drinking low carbohydrate beers e.g. pils lager and cider offer no benefit because of their higher alcohol content.
- Low alcohol drinks can be useful if you are driving but few are alcohol free so remember if you drink enough of them you may still be over the limit.
- Low alcohol wines are often higher in sugar than ordinary ones, so if you do choose these just stick to a glass or two.
- Drinks with a high sugar content e.g. sweet sherries, sweet wines and most liqueurs should be limited.
- Mixer drinks need to be 'diet' or 'sugar free' such as diet tonic water and diet cola.

•	Moderate alcohol consumption in line with recommended daily guidelines can be beneficial for your heart. Wine especially red wine may offer greater benefit than spirits or beer. However, there is currently insufficient evidence to suggest that you take up drinking if you are currently 'tee total'.
•	NEVER DRINK AND DRIVE

INSURANCE AND DIABETES

Most people living with diabetes have encountered difficulties arranging insurance, whether it is life assurance, income protection and family income benefit insurance or travel insurance.

Please note: this section aims to provide you with general information to assist in obtaining insurance. It is not advice nor can it take account of your particular circumstances. For advice, with a view to making decisions, you should consult an independent financial or other professional advisor.

• Travel insurance

Most travel insurance policies exclude pre-existing medical conditions (medical conditions you had before the policy was taken out) such as diabetes. It is essential when arranging the policy that you fully disclose your medical conditions to the insurance company including diabetes, even if they do not ask. Failure to do so could lead to them rejecting a claim, and then it is too late.

• Motor insurance

Most car insurance companies no longer penalise people with diabetes by charging higher premiums. If you feel that you are being discriminated against, complain to your insurance company. If you are not satisfied with their response, switch to another company. There are plenty to choose from and you can transfer your no claims bonus to your new company.

When applying for car insurance you must declare all 'material facts'. Diabetes is a material fact, so you need to declare it. The main danger of diabetes and driving is the possibility of having a hypoglycaemic episode (hypo), which could impair your judgement and lead to an accident. Although this is very rare, it can and does happen.

• Insurance/assurance for loans and life

Ask your mortgage advisor at the outset if their insurance products are available for people living with diabetes. Allow yourself plenty of time to investigate options, bearing in mind an application for life assurance can take from six to eight weeks to be processed. Apply for cover well in advance of when you need it to be in place. This will avoid a lot of last-minute frustration and inconvenience, especially if the insurance is needed for a mortgage.

Private medical health insurance

This type of insurance is very difficult or expensive for people with diabetes to arrange. Often the cost of any treatment relating to diabetes (including complications) will be excluded from the policy, so it's of limited value to people with diabetes. If you are covered by a scheme run by your employer, check the benefits available to you. If you move to another job, check whether you have a 'continuation option' under the scheme. Most private medical insurance schemes offer this option, which allows you to continue with the cover at your own cost.

Hospital cash insurance

This insurance covers funds you may need for certain hospital and outpatient treatment. It can be a very useful way of helping with some of the costs involved with medical treatment. If you are considering such a policy, fully check what treatment it will cover.

Body Mass Index Chart for Adults

