


Welcome

to the 46th issue of Type 2 & You

Welcome to the forty sixth issue of Type 2 and You. In this issue we continue our series of articles on different types of medicines for Type 2 diabetes and we look at the class of drugs called gliptins. We also continue with our series of articles on the 9 key annual health checks to which people with diabetes are entitled and we cover urinary albumin, understanding what it is and why it is an important check to have done. We also write about news from the diabetes world.

While writing this issue, the country is in lockdown with no knowledge of when it will end or at least, when some of the restrictions will be lifted. We closed the office because this seems the responsible and safest thing to do, so we can only apologise that we have not been there for you in the usual way. There is work being done from home and one of us is going into the office once a week to check the building and the post. We are doing our best and ask for your understanding. Our booklets are available on our website but you can email any requests or of course, you can always write to us, the old-fashioned way - the details are available on the last page. Having said this, we hope that by the time you receive this, there may be some promise of a relaxation of the rules.

We are also taking a look at eating carbohydrates in our diet and that perhaps consider lowering the amount of carbs we eat as it may help in the remission of Type 2 diabetes. During lockdown and especially in winter, some of us will probably eat more food than we would normally, if only



out of boredom, and this increases the risk of increasing weight – something to be avoided with diabetes. We also take a look at exercise and its benefits especially on mental wellbeing, and offer a reminder of how we can take exercise even if we cannot leave the house because of various health conditions.

One important message that we must give out is that if you develop health problems or difficulties coping with your diabetes, call your GP surgery, diabetes team or NHS 111 and A&E departments are open. The staff are there for you.

It is a difficult time for all of us and especially people with conditions such as diabetes and it is a lonely time for many of us, not being able to meet family and friends but we have to look ahead and hope for better things to come. As we write this, the snowdrops are coming out and bulbs are shooting up, so at least, the spring is coming to make us feel brighter.



AFTER BREXIT

Perhaps it is difficult to see at the present time, but there will come a time when we can safely travel abroad again. We are all aware that the UK has left the EU but because of the pandemic, perhaps we are not very aware of the changes that have come about since Brexit. While the changes affect everyone, some are particularly important for people with long-term health conditions, such as diabetes, so below is a brief outline of the key changes.

Health insurance

EHIC and GHIC - for travel within most European countries we have previously had a free European Health Insurance Card (EHIC). From January 2021, this remains valid until it runs out and then you have to apply for a free Global Health Insurance Card (GHIC). Just like an EHIC, you can apply for this new card on behalf of yourself, your spouse/ partner, your children (under 16) and other family members providing you all meet the conditions that you are all UK citizens.

You can obtain a GHIC card by applying on the NHS website: <https://www.nhs.uk/using-the-nhs/healthcare-abroad/apply-for-a-free-ehic-european-health-insurance-card/> Some websites try to 'sell' these cards but do not fall for this as the official cards are free.

With a still valid EHIC or the new GHIC you benefit from prompt, largely free health services in the 27 EU countries but from 1st January 2021, neither a GHIC nor most EHICs will cover you in

Norway, Iceland, Liechtenstein or Switzerland. When visiting these countries, you must make sure your travel insurance covers you for healthcare.

NOT a replacement for travel insurance – it is important to remember that the GHIC (or valid EHIC) is NOT an alternative to travel insurance. It helps you to access types of healthcare quickly and usually free at the point of delivery but not all countries offer the same free services that you would receive on the NHS so you could have to pay for some services. In addition, travel insurance is still needed for many reasons including getting you home following an injury, illness or specialist treatment for existing health conditions, such as diabetes.

Passports from January 2021

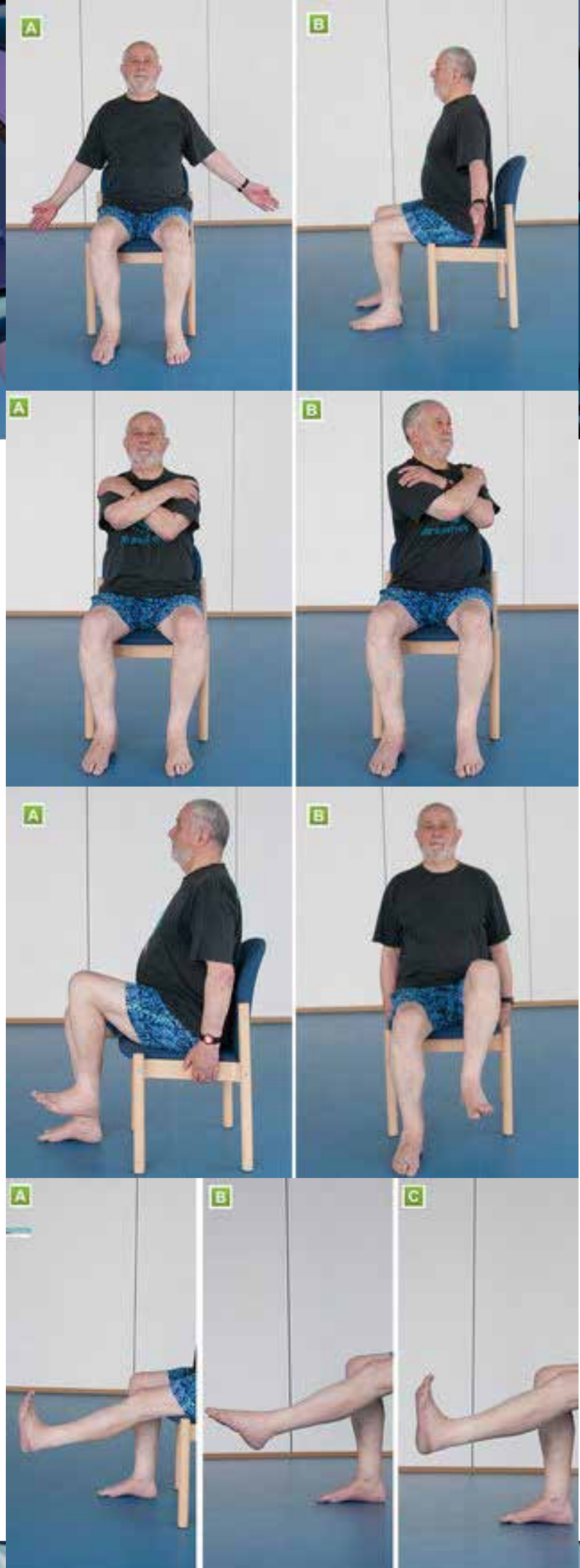
- You need at least 6 months on your passport to travel.
- Your passport must be no older than 10 years, even if it has 6 months or more left on it.
- You can apply online for a new passport at: <https://www.gov.uk/apply-renew-passport> (cost £75.50) or you can get a paper application form from a Post Office (cost £85.00).

Exercise is good for mental health

As we hear frequently on the news, one of the major concerns during this difficult time is people's mental wellbeing as it is hardly surprising that anxiety and depression may increase. It has been known for some time that exercise helps to reduce these problems but as people get older or have other health conditions as well as diabetes, they are not always able to do the aerobic and endurance-type exercises. However, a recent study from Sweden has shown that regular exercise, such as walking every day, may have a more significant effect on reducing anxiety and depression than the exercises such as running, swimming and high intensity sports.

We must not forget that some people have difficulty standing and walking but this doesn't mean that exercise is out of the question, there are chair-based exercises which can be done at home. Make sure you choose a chair that is stable, solid and doesn't have wheels.

If you, or someone you know has access to the internet, then the NHS website shows the exercises you can do. There are 3 basic types that will improve your flexibility, increase your strength and improve your balance. Here are some the exercises that you can do.



Diabetes remission in Type 2 diabetes with low carb diets at 6 months



For many years, the recommended diet for the treatment of both Type 1 and Type 2 diabetes has been a high carb/low fat diet but this has caused much debate over recent years. There is growing evidence that a low carb diet is better. Carbohydrates are sugars and starches found in bread, potatoes, pasta, rice cereals and sugars. They provide the energy our bodies need for its various activities. If we eat more carbohydrates than we need for energy at a particular time, then the excess glucose is stored in the liver for emergencies, such as extra physical activity or when blood sugar levels drop unexpectedly. However, if you frequently eat more carbs than your body uses, you are likely to gain weight.

Recently published research in the British Medical Journal (13 January 2021) has shown that people with Type 2 diabetes who followed low-carbohydrate diets for six months may experience greater rates of diabetes remission. The researchers examined the effects and safety of low and very low carbohydrate diets for people with Type 2 diabetes.

The definition of diabetes remission was an HbA1c of less than 6.5% (42mmol/mol) and the results showed:

- When low carb diets with medication were compared with usual diets, after 6 months

those on low carb diets had higher rates of diabetes remission – 57% versus 31%. However, in people not taking medication and treated by diet-only the remission rates were much smaller.

- At 6 months, there were large improvements in weight loss, triglycerides, and insulin sensitivity, which decreased at 12 months.
- After 12 months, there was only a small effect but also a slight increased risk of Type 2 diabetes.
- They also found no significant difference in quality of life after 6 months but a worsening at 12 months

Life has become more sedentary over the last 20 years and this has not been helped by the lockdown situation, when we have all been forced into less active lives, so perhaps it is worth considering reducing the amount of carbs you eat. However, if you are going to do this and you are on medication, you should talk to your healthcare professional because your medication may need adjusting.

Note: IDDT has a booklet about carbohydrates, if you would like a copy, contact IDDT using the details at the end of this issue.

GLIPTINS / DPP-4 INHIBITORS

This article is a continuation of our series of articles about the various drugs used to treat people with Type 2 diabetes, this time it is about DPP-4 inhibitors, also known as gliptins.

Dipeptidyl peptidase-4 (DPP-4) inhibitors are a relatively new class of drugs in tablet form, first approved in the US in 2016. They are usually prescribed as a second or third line treatment to lower blood glucose levels in people with Type 2 diabetes who have not responded well to drugs such as metformin and sulphonylureas.

DPP-4 inhibitors work by blocking the action of DPP-4, an enzyme in the body that destroys a hormone called incretin. Incretins are released throughout the day and help stimulate the production of insulin when it is needed (eg after eating) and reduce the production of glucagon by the liver when it is not needed (eg during digestion). They also slow down digestion and decrease appetite which may be beneficial for people who need to lose weight. So, by protecting incretins from damage, DPP-4 inhibitors help regulate blood glucose levels.

Gliptins are effective in lowering blood glucose levels and, because they can help reduce appetite, may be beneficial for people needing to lose weight.

The table below lists the DPP-4 inhibitors licensed for prescription in the UK

Generic Name	Brand Name	Dose & Admin. Frequency
Sitagliptin	Januvia	25, 50 and 100 mg tablets. Once Daily
Vildagliptin	Galvus	50 and 100mg tablets. Twice Daily
Saxagliptin	Onglyza	2.5 and 5.00mg tablets. Once Daily
Alogliptin	Vipidia	6.25, 12.5 and 25mg tablets. Once Daily
Linagliptin	Trajenta	5mg tablets. Once daily

Notes:

- The dosages listed are minimum to maximum dosages and your prescribing health professional should discuss with you what is the appropriate amount for you to take and when to take it.
- If prescribed in combination with sulphonylureas or insulin, the dose of either of these may need to be reduced or a lower dose of the gliptin may be prescribed. This is to reduce the risk of hypoglycaemia (low blood sugars).
- The DPP-4s on the list are also available in combination with other drugs.
- They are only approved for people over 18 years.

All drugs have side effects for some people and the adverse effects of DPP-4 inhibitors include:

- gastrointestinal problems – including nausea, diarrhoea and stomach pain,
- flu-like symptoms – headache, runny nose, sore throat,
- skin reactions – painful skin followed by a red or purple rash,
- DPP-4 inhibitors have been linked with an increased risk of pancreatitis. If you experience a severe pain in your upper abdomen which may be accompanied with nausea and/or vomiting, you should call for medical help.

This list is not exhaustive and, as ever, if you have any concerns then contact your prescribing health professional.

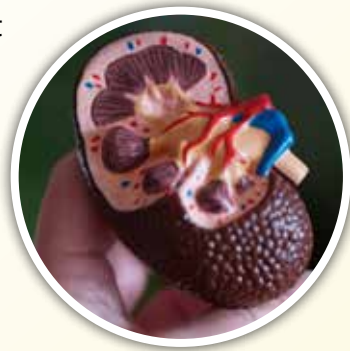
Your 9 Key Tests Explained

PART 3

This is the third in a series of articles we are presenting in Type 2 & You about your 9 annual key tests to which you are entitled under the NHS Constitution and recommended by the National Institute of Health and Clinical Care Excellence (NICE). The aim of these tests is to take a measure of how well your diabetes is managed, in both the short and longer term, and to provide advice about continued support.

In each article we will try to explain what the tests are and what they test for, how they carried out and by who and how you get the results. Just to remind you, the 9 Key Tests are:

1. Weight measurement
2. Blood Pressure
3. Smoking Status
4. HbA1c
5. Urinary Albumin
6. Serum Creatinine
7. Cholesterol levels
8. Health of eyes
9. Health of feet



I hope in these articles we can shed some light on their purpose. In this third article we look at urinary albumin and why it is measured.

WHAT IS URINARY ALBUMIN?

Albumin is a protein that is in most animal tissues. In healthy people, urine contains very little protein and an excess is a sign of kidney or bladder infection or the first sign of kidney damage. Healthy kidneys do not let albumin pass from the blood into the urine but if kidneys are damaged, they do let some albumin through. This does not always produce symptoms and may only show up on routine clinic tests, which is why urinary albumin is one of the 9 key checks. The two most common causes of protein in the urine are diabetes, high blood pressure or both.

When people are diagnosed with Type 2 diabetes, they can have had the condition for some years before diagnosis, so albumin in the urine can be present at diagnosis.

WHAT DO NORMAL KIDNEYS DO AND HOW DO THEY DO IT?

- Inside each kidney there are about a million tiny units, called glomerula, that filter and remove excess fluid and waste products from the blood as urine.
- The waste products are formed from the breakdown of the protein we eat and from normal activity.
- The kidneys also produce hormones that help in the production of red blood cells, build strong bones and help to keep blood pressure (hypertension) under control – one of their most important functions.
- In both longstanding and less well controlled diabetes, the kidneys have to work hard to get rid of the excess sugar and the small blood vessels in the kidneys can be damaged.

DOES KIDNEY DAMAGE PRODUCE SYMPTOMS?

In the early stages there are no symptoms but any kidney damage should be picked up in the urine tests carried out at your normal annual clinic visit. Passing foaming urine can occur from time to time but if this persistent or more noticeable over time, then you should see your doctor.

MICROALBUMINURIA AND THE TESTS

The presence of urinary albumin (also called microalbuminuria) is tested for as one of the 9 key checks that people with diabetes should receive at least annually. If present, then your doctor will carry out further tests. This test checks the ratio of albumin to creatinine, another substance that if higher than normal is a good predictor of kidney damage. We will write about creatinine in the next issue of Type 2 & You.

Glomerular filtration rate (GFR) is a test used to check how well the kidneys are working and tells your doctor the stage of any kidney damage. The earlier kidney damage is detected, the better the

chance of slowing or stopping its progression. If your GFR number is low, your kidneys are not working as well as they should, but what do the numbers mean?

In adults, the normal GFR number is more than 90. GFR declines with age, even in people without any kidney damage. The chart below gives the average estimated GFR based on age.

Age (years)	Average estimated GFR
20–29	116
30–39	107
40–49	99
50–59	93
60–69	85
70+	75

Don't panic at one result! In general, a GFR below 60 for three months your doctor will want to investigate further.

PROTECTION OF THE KIDNEYS

Aggressive treatment of blood pressure and stopping smoking are important ways to prevent or treat kidney damage but there are also drugs that may have a protective effect on the kidneys.

ACE INHIBITORS

ACE inhibitors, are drugs normally used for the treatment of high blood pressure, such as enalapril or captopril. However, there is evidence that the use of ACE inhibitors in people who start to show small amounts of protein in the urine, helps to reduce the progression to macroalbuminuria. In other words, the use of ACE inhibitors may have a protective effect on the kidneys, even in people whose blood pressure is normal.

SGLT2 INHIBITORS

These are relatively new drugs which by blocking reabsorption of glucose in the kidneys, lower blood glucose levels. There is research which shows that they can have a protective effect on the kidneys in people with Type 2 diabetes by slowing down the progression to more serious kidney damage. The following SGLT2s are available: Invokana, Forxiga, Jardiance and Steglatro.

IDDT has a leaflet on Kidneys and Diabetes, so if you would like a copy, contact IDDT using the details at the end of this issue.

IDDT News

IDDT Event

As a charity for people with diabetes, IDDT usually holds an Annual Event. It is informal and an opportunity for people with both Type 1 and Type 2 diabetes and their spouses and partners to meet other people who live with diabetes as well learn more about their diabetes from doctors and health professionals.



Like many other organisations our already delayed 2020 Annual Event was postponed until April 2021 but at the time we were not expecting a third lockdown. As we are all only too well aware, the third wave has struck the UK and so we will not be holding our Event and Annual General Meeting in April 2021 but we have rebooked it for Saturday, 23rd October 2021. We hope this will be possible and that it will be safe to meet up again and we will keep you informed about the Event through the Newsletters and our website.

Thank you from Jenny Hirst, Co-Chair of IDDT

None of us need reminding of the difficult times we are all having. Charities are facing financial challenges, so as Co-Chair of IDDT, I want to say a huge thank you for the many generous donations we received from so many of our members and supporters. However large or small, every one of them is welcome and helps us to continue with our work. In addition, thank you to everyone who bought IDDT Christmas Cards – for the first time in our history we actually sold out!

I would also like to thank IDDT staff for their hard work and dedication through these difficult times and to thank all the unseen people who have helped us to keep going throughout the year.



THE IDDT'S LOTTERY DRAW WINNERS

We are delighted to announce the winners of our latest monthly lottery draws. They are as follows:

Winners of the November 2020 draw are:

- 1st prize of £566.44** goes to Anon. from Eastbourne
- 2nd prize of £423.90** goes to Kenneth from Luton
- 3rd prize of £282.60** goes to Anon. from Morpeth
- 4th prize of £141.30** goes to Janet from Scarborough

Winners of the December 2020 draw are:

- 1st prize of £579.36** goes to Anon. from Halifax
- 2nd prize of £434.52** goes to Jeremy from Colchester
- 3rd prize of £289.68** goes to Sylvia from Kettering
- 4th prize of £144.84** goes to Patricia from Waltham Abbey

Note: Our apologies for only announcing the Lottery results for two months due to lock-down but the winners of the draws for January, February, March and April 2021 will be announced in our June 2021 Newsletter and on our website as soon as possible.

A huge 'Thank You' to everyone who supports IDDT through the lottery.

If you would like to join in for just £2.00 per month, then give us a call on 01604 622837 or email enquiries@iddtinternational.org

If we can be of help in any way, please contact:

InDependent Diabetes Trust (IDDT), PO Box 294,
Northampton NN1 4XS Tel: 01604 622837
email: enquiries@iddtinternational.org Or visit our
website: www.iddtinternational.org

Bits and Pieces

Eating less at night may reduce overall calorie intake

The UK National Diet and Nutrition Survey published in August 2020 has shown that eating most of the total daily calories in the evening is associated with a less nutritious diet and a higher calorie intake. Unfortunately, hunger pangs are often strongest later in the day so this could influence both the type and amount of food we eat. The researchers commented that the timing of energy intake may be an important modifiable behaviour to consider in future nutritional advice. Further research is necessary to find out whether spreading out meals and snacks and/or the types of food eaten in the evening affect body composition and health.

Mediterranean diet may lower women's risk of Type 2 diabetes

A study of 25,000 participants in the Women's Health Study found that the likelihood of developing Type 2 diabetes was 30% lower in women who followed a Mediterranean diet compared with those who did not. The researchers analysed their food intake and biomarkers linked to diabetes. The Mediterranean diet includes using Virgin Olive oil as the primary cooking fat, seafoods, legumes such as lentils and chickpeas, nuts and seeds and leafy greens. (JAMA Network Open, 19th November 2020)