

### the magazine of Blood Pressure UK ISSUE 43 > SUMMER 2018

### BE WILD AT HEART

Get out into the great outdoors and look after your blood pressure this summer

# LIFE AFTER STROKE

Physiotherapist Marianne explains how she helps people get back on their feet after a stroke

# HOW HIGH BLOOD PRESSURE CHANGED HISTORY

Had President Roosevelt not had a stroke, might the history of Europe have turned out very differently?

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pressure the magazine

of UK charity, Blood Pressure UK. We aim to significantly improve the prevention, diagnosis and treatment of high blood pressure in order to prevent death and disability from stroke and heart disease. We are an independent registered charity and rely on donations and grants to carry out our work. All views expressed within the magazine are those of the authors and do not necessarily reflect those of Blood Pressure UK. The information in this magazine is designed to support and supplement your relationship with your doctor, not to replace it.

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# Welcome

### From Katharine Jenner, Chief Executive Officer

It's been a fairly mad and hectic but fun few months as I welcomed my second child, baby Audrey, into the world. The smiles have finally started to appear and the moments of calm among the chaos have brought time to reflect on the roles we all have in looking after not only ourselves, but those around us.

It's a theme that's been on the minds of the health community too – what roles do we all play in taking care of the nation's health and where does the responsibility lie?

A recent conference hosted by Public Health England (PHE) was home to some very interesting discussions on who is responsible for preventing diseases of the heart and blood vessels in the UK – is it all of us as individuals, or the Government and the public services they provide?

After many years in public health and with a new little one at home, it becomes increasingly clear to me that it is up to all of us to do just as much as we can. There are things we can do for ourselves just as there are opportunities for decision-makers to learn and for the food industry to improve their products.

This summer, why not take a few moments in the sunshine to reflect on the changes you'd like to make to improve your own health and well-being, and that of those around you. See how getting back to nature can be a wonderful way to get active on page 11, get ideas for ditching the salt or the cigarettes on page 9 and 10, and encourage others to look after their health by taking part in Know Your Numbers! Week, page 20.

As always, if you need a little inspiration, information or support, our healthcare team are here to help. Have a happy and healthy summer.

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SIGN UP FOR YOUR COPY OF POSITIVE PRESSURE

If you've enjoyed this magazine but this isn't your own copy, then why not sign up to become a Blood Pressure UK member and have your own Positive Pressure delivered direct to your door, together with a host of other members' benefits? **Call us on 0207 882 6255** or visit www.bloodpressureuk.org/ Supportingyou



# Out and about A few things we've been up to lately



### Raising awareness in Malaysia

Our Chairman, Professor Graham MacGregor, travelled across the globe to the Malaysian Salt Symposium 2018 this January. He joined a team of experts to speak about how salt affects your health as part of a series of talks, health screenings and cooking demos to help educate Malaysia's public on the importance of eating less salt.

### Taking action on salt

We rubbed shoulders with MPs, NGOs, and food industry representatives at the House of Commons this March for the reception of Salt Awareness Week. We gave health advice and swapped ideas on how we can work together to lower the nation's salt intake and with it, our blood pressure. See page 9.





### FOOD MATTERS LIVE 2018

We're off to London's Excel Arena from 20-22 November in support of Food Matters Live 2018, the UK's largest showcase of innovations in food and drink aiming to improve health and wellbeing. The three-day event brings together food industry experts, policy makers, start-ups and household names. Would you like to come too? Visit www.foodmatterslive.com

### TAKING RESPONSIBILITY FOR HEALTHY BLOOD VESSELS

The local pressure-testing programmes run by London's Haringey Council and Cheshire and Merseyside's Fire & Rescue home visit crew were shining examples of ways to prevent heart disease and stroke presented at Public Health England's Getting Serious About Cardiovascular Disease Prevention conference. It was great to see health professionals, local councillors, commissioning groups and NGOs taking note at The Oval this February.





### WE'RE LOOKING AFTER YOUR PERSONAL INFORMATION

New data protection laws came into force in May and we've made sure your details are safe

The Data Protection Act was written in the 1990s and, given that the world has changed since then with new technologies and online forms of communication, it was time for an update. On 25 May, the new General Data Protection Regulation rules came into force to make sure people aren't receiving endless marketing emails, letters and phone calls.

We've updated our data protection and privacy policies to make sure we're keeping your information safe, secure and private, including email addresses, phone numbers and payment details. We won't share it with third parties or bombard you with requests for money. Contact us or visit our website if you would like more details.

# Letters Our Healthcare team is here to help

Dear Blood Pressure UK, I've heard recently that sugar raises blood pressure but I don't understand the connection – how does eating too much sugar affect your blood pressure? How much is a safe amount of sugar to eat, and is it the same for children? Best wishes, Ali

#### Dear Ali,

That's a very good question. The evidence suggesting that eating too much sugar could directly put up our blood pressure is growing, possibly related to a sharp rise in blood sugar. What we know for certain is that gaining weight puts up blood pressure, and eating too much sugar is directly linked to putting on weight.

We recommend eating less sugar as part of a healthy approach to looking after your blood pressure. There's really no need for added sugars in the diet at all. That's the 'free' sugar added to the foods we buy ready-made and the sugar we add at home, as well as the sugar in fruit juice, smoothies, syrups and honey.

It's hard to cut these things out completely, and the recommended maximum for adults is around 30g per day, around seven teaspoons or cubes. For children aged seven to 10 it's no more than 24g, and for four to six-year-olds it's 19g.

To help you cut back, avoid sugary drinks, biscuits, chocolate, flavoured yoghurts and breakfast cereals, but don't worry about sugars in whole and chopped fruit or milk-based products.

Try our free smartphone app, FoodSwitch, with its SugarSwitch filter. It allows you to scan the barcode of your favourite products to see how much sugar (and salt) is in them, and swap them for healthier choices. Get the app from iTunes or Google Play.

With best wishes, The Blood Pressure UK healthcare team The recommended maximum sugar for adults is around 30g per day, around seven teaspoons

#### Dear Nirmala

Thank you so much for your wonderful wonderful support; I cannot tell you how much I appreciate your help, you really made me feel much better after our conversation.

Nutrition

Typical Values

Energy Value

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I am now reading the labels on everything in supermarkets and am looking for those green labels, and I bought myself some bulgur wheat today.

I would certainly like to get back to you in a couple of months to give you an update. Thank you so much for your support

My best wishes, Andy

It's always nice to receive mail, especially to hear we've made a difference. Nirmala is a hypertension nurse specialist and is part of our healthcare team. After a chat about the simple changes we can make to our diets to look after our blood pressure, such as looking out for green labels for salt on food packets and going for wholegrain options, she helped put our new member Andy's mind at rest.

We're here to help you take care of your health, so if you ever have a question or a worry about your blood pressure, just get in touch and we'd love to point you in the right direction. Reach us on help@bloodpressureuk.org or 020 7882 6218.

# **Blood Pressure News**



# NICE to consider a lower target blood pressure

### After the US lowered the cut-off point for diagnosing and treating high blood pressure, the UK could follow suit

Last November, the American College of Cardiology and the American Heart Association published guidelines lowering the level for diagnosing and treating high blood pressure from 140/90mmHg to 130/80mmHg. The change came after a 2016 study, called the SPRINT study, showed that lowering systolic blood pressure (the top number) to 120mmHg, rather than 140mmHg, lowered the risk of heart disease and stroke by a quarter. The National Institute for Health and Care Excellence (NICE) are due to update their blood pressure guidelines for UK GPs and health professionals next August and will look at the diagnosis cut-off points as part of it. They will release a draft version of the guidelines for consultation early next year.

NICE have commented: "we are asking some of the same questions being considered in the US and in doing so will be considering some of the same evidence".

If the guidelines are lowered, millions more people could be diagnosed with stage 1 high blood pressure, while others will move from stage 1 to stage 2, which is usually treated with medications.

The changes are being considered to spare thousands of people a year the trauma of heart attacks and strokes. While some people would benefit from a move to medications, for many, it's simply a nudge to take on a healthier lifestyle and a reminder to the Government to take action.

### CHANGING HOW BLOOD PRESSURE IS MEASURED COULD SAVE LIVES

### New research shows measuring blood pressure at home over 24 hours gives a far better idea of risk of stroke and heart attack than measuring it in clinic

Scientists from University College London and universities in Spain have found that measuring blood pressure using a technique known as 24-hour home ambulatory blood pressure monitoring (ABPM) is more accurate than measuring it in clinic and should be used to make decisions about treatment.

In the largest study of its kind, published this April, the researchers looked at the blood pressure measurements of 63,000 people and compared them to their risk of stroke or heart attack four years later. Blood pressure measurements were taken both in clinic and using ABPM, and the latter was 50% more accurate and better at predicting health problems.

ABPM involves wearing a small blood pressure monitor around your waist for a day and night, taking readings

every 20-30 minutes as you go about your daily life. This study showed that it overcame the problems of white coat hypertension, where your blood pressure is raised due to the stress of being in clinic, and masked hypertension, where you have raised blood pressure but it appears to be normal in clinic.

ABPM has long been known to give the most accurate idea of what your blood pressure is really like, as it takes so many more readings than is possible in clinic. This is the first time a study has shown without a doubt that it is best at predicting heart attack and stroke and it should be used

more widely to help doctors make decisions on the best treatment for their patients.

### **Blood pressure news**

### "Britain needs to go on a diet"

Public Health England announce plans to cut the nation's calorie intake as new evidence shows we eat an extra 300 calories every day Public Health England (PHE) are demanding action from the food industry to tackle the obesity crisis. They have published new plans requiring food manufacturers to cut the calories in food products by 20% over the next six years, both in shop-bought foods as well as restaurants, cafes and takeaways, and are asking for clearer labelling on menus.

The plans were announced just as new research found that Britain has the worst diet in Europe, with more processed food than any other country adding to the obesity problem. If the calorie reduction targets are met, they will prevent an estimated 35,000 premature deaths and save £9 billion in healthcare costs over 25 years.

PHE have also updated their healthy eating advice for the public. Their new 400, 600, 600 guideline recommends eating 400 calories at breakfast, 600 calories at lunch and 600 at dinner – the idea being to end the day within the recommended 2,000 calories for women and 2,500 for men while still allowing for drinks and snacks. They haven't changed the maximum amounts of calories to aim for each day.

Duncan Selbie, Chief Executive at PHE said "Britain needs to go on a diet... The simple truth is on average we need to eat less."

We are often unaware of how many calories we are eating, particularly from snacks, drinks and puddings. Try to fill up on healthy meals with lots of vegetables, wholegrains such as brown rice or whole wheat pasta, and lean chicken or fish, rather than 'saving room' for calorie-laden desserts. And don't forget to watch the salt!



### ANTICOAGULANTS PREVENT STROKE IN ATRIAL FIBRILLATION PATIENTS

# New evidence supports a move towards direct-acting oral anticoagulants (DOACs) in favour of warfarin for treating atrial fibrillation

Atrial fibrillation (AF) is a type of irregular heart beat and a major cause of blood clots and stroke. It's treated with medicines called warfarin and DOACs which both prevent blood clots, but the best option hasn't been entirely clear.

Now a major new study looking at all the published research on the subject, with 100,000 patients in total, has shown that DOACs are the best choice overall. They're better at preventing blood clots, heart attacks and stroke, plus they're safer, with a lower risk of bleeding problems, and the benefits out-way the higher cost.

This welcome study means health professionals can treat atrial fibrillation patients with confidence. High blood pressure and atrial fibrillation are both major causes of stroke, and many people have both together. AF often has no symptoms, so ask your GP about it on your next visit.



### SUPERMARKETS BAN SALE OF ENERGY DRINKS TO KIDS

### Major UK supermarkets respond to calls from experts to ban sales of high-sugar, high-caffeine drinks to under 16s

Last December, Action on Sugar found that one can of energy drink can contain more than a day's worth of sugar and more caffeine than two cups of coffee. The sugar experts, along with TV Chef Jamie Oliver and teacher groups, called for a ban on the sale of the sugary drinks to under 16s, who are their main consumers.

Waitrose were the first to announce a ban, and ASDA, Aldi, the Co-op, Lidl, Morrisons, Tesco and Sainsbury's have followed suit. Now, customers need to provide proof of age when buying drinks with more than 150mg caffeine, including Red Bull, Monster, Relentless and Rockstar.

We are delighted for the successful campaigning work of our sister charity Action on Sugar. Energy drinks can contain up to 20 teaspoons of sugar which is adding to the obesity epidemic, raising blood pressure and the risk of diabetes – they're not suitable for children.



### A new study has found that people who are genetically predisposed to weight gain could benefit the most from a healthy diet

Researchers from Harvard University and Tulane University have found that long term healthy eating can not only help with weight control but can offset the genetic risk for weight gain.

They looked at the genes linked to weight gain in over 14,000 people, along with their diet and changes in weight over 20 years. Unsurprisingly, a healthy diet which was low in salt, sugary drinks, alcohol, red meat and processed meat, but rich in fruit and vegetables, nuts and whole grains was linked to a lower body weight. More interestingly, the effect was greater in people who had a higher genetic risk of obesity compared to those with a low genetic risk.

This encouraging study suggests that even if your genes play a role in your weight, weight gain isn't inevitable and weight loss isn't impossible. Governments need to make sure healthy foods and drinks are available and affordable to everyone so that people are able to take care of their diets.

# A simple measure to save lives

# The world's largest blood pressure screening programme sets out to take 1.5 million blood pressures

Volunteers set up screening stations around the world this May for the second ever May Measurement Month. For one month, campaigners led by the International Hypertension Society set

out to reach as many people as possible with a free blood pressure check, aiming to put a stop to the 10 million lives lost needlessly every year due to high blood pressure. Last year's



campaign took 1.2 million people's

blood pressures in over 100 countries. In the process, they found over 100,000 people with high blood pressure who weren't aware of it, giving them the chance to get treatment.

2018's event was set to be even bigger, providing vital information to Governments about their nations' health, aiming to inspire them to make changes and save lives. Making blood pressure tests available to everyone is the

 $\stackrel{\scriptstyle{\scriptstyle{\sim}}}{\scriptstyle{\scriptstyle{\sim}}}$  most effective way to prevent the health problems

caused by high blood pressure and we look forward to supporting May Measurement Month for as long as it's needed.



black Caribbean or South East Asian background, and you have been diagnosed with high blood pressure. Visit www.aimhy.org.uk for details. This exciting trial may help doctors to avoid the trial and error of finding the best medicine for each person in the future, getting blood pressure under control much faster.

### AIMING HIGH FOR PERSONALISED MEDICINE

New AIM HY INFORM trial sets out to find the best blood pressure medicines for different ethnic groups, and you could take part

Researchers from Cambridge University have begun a new study aiming to find the best blood pressure medicines for people from different ethnic groups. Ethnic background is known to play a role in how well blood pressure medicines work, but most research has been done in white Caucasian people.

Those taking part in the trial will be given three to four blood pressure medicines in turn to see which drug or combination works best. The results should allow doctors to tailor treatments by taking their ethnic background into account.

The trial will also explore whether a person's genes and the chemical makeup of their blood can predict which treatment will work best. If they can, it will be possible to choose the best drug for each individual using a simple blood test.

You can take part in the trial if you are aged between 18 and 65, you're from either a white (Caucasian), black African,

### **Blood pressure news**

# Taking bold action on salt

While the UK struggles to get down to the 6g a day salt target, campaigners Action on Salt inspire support from the food industry with their annual

Salt Awareness Week and share

advice on how you can cut back



Just as new research shows that eating an otherwise healthy diet can't offset a high salt intake, Action

on Salt launched their

annual campaign raising awareness of the dangers of too much salt.

During Salt Awareness Week in March, the campaign group, previously known as Consensus Action on Salt & Health, urged the Government and the food industry to step up their efforts to add less salt to our food to lower the nation's blood pressure and the risk of heart disease and stroke.

MPs, NGOs and food industry representatives turned up in support of the campaign at the parliamentary reception at the House of Commons, discussing the challenges and opportunities that lay ahead.

#### Taking a stand

Professor Graham MacGregor, Chairman of Action and Salt and Blood Pressure UK, took to the mic calling for Public Health England to set tougher targets for the amount of salt the food industry adds to our food and bring in legislation if they're not met. He added: "We have come a long way and it's no good quitting now – we still have a long way to go if we are to reach 6g a day target." Luciana Berger, MP for Liverpool Wavertree, stressed the need for urgent action, saying: "Every 1g of salt reduced could prevent 7,000 deaths in our country [per year]. It is time for us to take bold action on salt reduction."

Caroline Klinge of LoSalt also took to the stand, explaining how using potassium-based salt replacers in manufactured food instead of salt has huge potential to lower our salt intakes, following the release of a long-awaited report approving their use.



FOCUS ON FAMILIES The theme for this year's Salt Awareness Week

was working

together as a family to reduce salt intake. Sarah Alderton, Nutritionist for Action on Salt, explains why:

### TAKING ACTION AROUND THE WORLD

The UK wasn't alone in its efforts. The World Action on Salt & Health team worked with organisations from 100 countries who took action on salt globally. There were food surveys in Australia, social media campaigns from the American Heart Association and teams in China, a Salt Symposium in Bahrain and the launch of a salt and sugar reduction programme in Algeria.

"Many people know that eating too much salt is bad for their health but think it's only a cause for concern later in life. The reality is that even in childhood eating too much salt raises blood pressure, which tracks into adulthood and later life. That's why it's important for us all to eat less salt, no matter what our age."

"Simple steps like removing salt from the table and not adding salt when cooking will help stop kids from developing a taste for salty food and the habit of adding extra salt, and working together as a family will make changes easier."

GPs and pharmacies across the UK supported the healthy living message with posters and displays, and the widespread media coverage reached millions, helping to improve the health of generations to come.

NEWS <



### CHINESE FOOD "SHOULD CARRY A HEALTH WARNING"

Chinese takeaways can contain as much salt as five Big Macs with some meals reaching near toxic levels, according to a survey carried out by Action on Salt for Salt Awareness Week. One takeaway meal from London's Chinatown contained 11.5g of salt, almost double the 6g recommended maximum for a day. Supermarket versions were not much better, one rice dish contained 4.4g of salt in one portion.

The shock findings emphasise the need not only for a healthier food industry but for PHE to consider making nutrition labelling in restaurants obligatory, so that people know what they're eating. The move would follow in the footsteps of New York City and Chile, where restaurants and supermarkets are required to put warning labels on high-salt foods.



### Blood pressure news

### 6 WAYS TO 6 GRAMS

The Action on Salt team share the simple changes families can make to cut back on the white stuff

**1** Gradually add less salt to your favourite recipes. Our taste buds are quick to adapt to less salt – it only takes a few weeks and you'll be able to appreciate the real flavour of foods.

**2 Use the FoodSwitch app** to find healthier alternatives to your favourite foods, the SaltSwitch filter will find lower salt options.

**3** Use herbs, spices, garlic and salt or pre-mixed seasoning mixes, rubs and marinades. Try a squeeze of lemon juice on fish, garlic and rosemary on potatoes, cinnamon or ginger on carrots or oregano on courgettes and tomatoes. Or spice things up with cayenne pepper and paprika.

Take salt and salty sauces off the table, like soy, chutneys and pickles, ketchup, BBQ sauce and mayo, so younger family members won't develop the habit of adding salt.

**5** Check food labels before you options. Get to know the really salty foods like bacon, salty pasta sauces and soups, crisps and popcorn, and look out for reduced salt versions of store cupboard staples like tomato ketchup, brown sauce, baked beans and stock cubes.

**6** Drain and rinse canned foods like vegetables and beans, choose the options in water with no salt added and go for more fresh fruit and vegetables too.

### **Blood pressure news**

# KICKING THE HABIT

New research finds light smoking dramatically raises your risk of heart disease while PHE find e-cigarettes are far less harmful, and there are many ways to quit

### Even light smoking is linked to heart disease and stroke

A major new study published in February has found that smoking just one cigarette a day causes damage to your heart and blood vessels. A team from University College London's Cancer Institute looked at 141 studies examining smoking and diseases of the blood vessels, and compared the effects of smoking one, five or 20 cigarettes a day.

While you might expect to see that smoking only one or two cigarettes a day brings very little risk of heart disease or stroke, as seems to be true for cancer, this was not the case.

The researchers were surprised to find that even light smoking raises the risk of heart attacks by around half and stroke by a third, far higher than expected. The authors concluded that for smokers the ultimate goal should be to quit completely over time, rather than cut back.

# PHE support vaping to help smokers quit

Public Health England (PHE) published a new report this February finding that e-cigarettes are 95% less harmful than smoking, adding to the growing consensus that vaping is a sensible alternative to smoking for those trying to quit.

A team of tobacco experts looked at the evidence around e-cigarettes and found that rather than serving as a gateway into smoking, they serve as a gateway out of it, helping at least 20,000 people per year to quit.

Electronic-cigarettes, also known as vaporisers, allow you to inhale nicotine

### Getting help to quit

No matter what your age or how long you've smoked for, stopping could add years to your life as a vapour instead of as smoke, easing cravings. Many smokers haven't tried them, believing that it's the nicotine in cigarettes that causes harm when in fact it is the smoke. As Professor John Newton, Director

for Health Improvement at PHE, put it: "It would be tragic if thousands of smokers who could quit with the help of an e-cigarette are being put off due to false fears about their safety."



and will make you feel better too. Within hours, the chemicals from the smoke will start to clear from your blood, and within months you will feel much fitter and healthier. Your skin will improve, your stress levels will fall, your breathing will open up and as your circulation improves, walking and exercising will get easier.

There's no doubt that getting past the cravings is hard work, and going cold turkey is the least effective way.

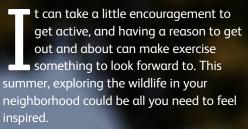
You are far more likely to give up for good if you use stop smoking products and have expert support. With free services throughout the UK, there is no need to go it alone.

Choose from a range of medicines and products such as skin patches, chewing gums and nazal sprays, and get expert support that suits you, such as face-to-face meetings, phone calls or smartphone apps.

Call the NHS Smoking Helpline on 0300 123 1044, visit your local NHS Stop Smoking Service or visit Smokefree at nhs.uk/smokefree to get started.

# THE GREAT OUTDOORS

Getting outside and getting active will help to look after your blood pressure, and exploring the surprising wildlife on your doorstep could be all the motivation you need



For Professor Mark Caulfield, walking in the countryside with his dog Ron helped him to look after his blood pressure and get his weight under control.

"I became quite overweight for a while and it just goes to show that as you age you have to be more careful. It's harder to burn up extra energy as we tend to become less active, so you need to keep an eye on what you eat and make sure you get some exercise, even if it's just walking.

These are natural treatments which involve a simple lifestyle shift rather than taking another tablet. I've managed to get my weight under control and walking was a big part of that."

Take a look at these reasons to get out into nature, exercise and relax. Enjoy new sites by stepping off the beaten track, indulge a hobby like photography or bird watching, or take friends and relatives along on a day trip somewhere new.



#### Become a nurdle hunter

Enjoy a stroll along your local beach and look out for nurdles while you soak up some rays. And what, you may ask, is a nurdle? Nurdles are little lentil-shaped plastic pellets that are melted together to make plastic products, but they're sometimes spilled by the plastics industry and wind up in the sea, harming the wildlife.

Take part in the Great Nurdle Hunt, organized by FIDRA, to help keep our seas plastic-free and protect marine wildlife.

Get to know your nurdles at www.nurdlehunt.org.uk

#### Take the pulse of nature

The butterflies in our fields and meadows are a reflection of the health and biodiversity of the local environment, they're known as the pulse of nature. This July, give the wildlife in your area a health check and take part in the big butterfly count, Butterfly Conservation's annual survey.

Simply go for a walk in a sunny spot and count the species of butterflies you see for 15 minutes, identifying them with a free chart or App. Visit www.bigbutterflycount.org for details.

### Take a walk on the wildside

Get to know your local wildlife with a Random Act of Wildness every day. Go for a walk somewhere new, find a spot to listen to the birds or seek out the local urban wildlife.

The Wildlife Trusts are working with the University of Derby to show that spending time in nature is good for you, encouraging the UK to do one wild thing every day for 30 days throughout June, and on into the Summer. It's the 30 Days Wild challenge.

Visit www.wildlifetrusts.org for ideas and inspiration.





Saturday 7 July is National Meadows Day, a chance to celebrate wildflower grasslands near your city, village or wildlife reserve. Discover surprising insects, plants and reptiles with guided walks, wildlife hunts, arts & crafts and training workshops, all while helping to raise awareness of a disappearing habitat.

Visit www.magnificentmeadows.org.uk to find out more.

#### Name that tree

Use your mobile phone to identify the trees you see as you go out walking. The Tree ID app from The Woodland Trust allows you to identify trees by their leaves, branches or fruit and learn more about them.

Available from the App Store and Google Play.

#### Discover the natural wonders near you

Find the natural wonders you never knew existed with the Wildlife Trust's website and Nature Finder App. Go for a stroll or plan a getaway with over 2,000 nature reserves, woods, meadows, moors, heaths and lakes to choose from. Learn about new species or find new things to do – help hedgehogs

in Suffolk, become a wildlife photographer in Wales or discover snorkeling trails in Scotland.

www.wildlifetrusts.org for ideas.



### Stop and smell the wild roses

Enjoy some peace and quiet or have fun with the family with The Great British Wildflower Hunt. Download a spotter sheet to identify the wild flowers you find in your nearest parks, churchyards, footpaths or woodlands, and help Plantlife's campaign to protect the local flowers, butterflies, bees and birds. Visit https://www.plantlife.org.uk



0207 882 6255 or email info@bloodpressureuk.org



#### Join the Bee Cause

Make the Great British Bee Count an excuse to mosey through the town enjoying the plants and flowers. Use the bee count App to identify the bees you see and help Friends of the Earth monitor our bees. Bees are in trouble in the UK, but we need them to pollinate our flowers, fruits and vegetables. Help keep Britain buzzing with the annual bee count survey until 30 June. Visit www.friendsoftheearth.uk

#### Be a bat detector

Whether you're a morning lark or a night owl, you can take part in the Bat Conservation Trust's Sunset Sunrise Survey. Spend a peaceful hour at dawn or dusk looking for bats and nocturnal animals. Surprisingly, almost everyone who takes part in the survey sees bats. Spot them as they fly from their roosts in trees and buildings, or as they go home to snooze in the morning. Find out more from www.bats.org.uk



# **STOP** STROKE

One thing I have learned many times over is never to underestimate someone who is determined to recover. I enjoy being surprised by my clients' progress

14



# Life after stroke

Marianne is a Specialist Neurology Physiotherapist based in London and works with people recovering from a stroke. She explains how she uses physiotherapy techniques to help people regain their independence and enjoy the things they love in life

n my line of work, no two days are the same. It's always interesting working with people who have had all sorts of life experiences and have a whole variety of expectations for their rehab. I qualified as a chartered physiotherapist in 2006, and for the last five years I've specialised in working with people with neurological problems. Most are recovering from a stroke and want to get back to their normal lives.

### The effects of a stroke

A stroke is always a life-changing event, both physically and psychologically. The physical changes are sometimes obvious, sometimes not so clear. Muscle weakness, changes in movement and walking pattern, or difficulty using a limb are easy to see, disruption to sensory pathways, memory problems and visual problems are less so.

The emotional impact can be huge for the client and their family – not only due to grieving for the unexpected loss of life role and identity, but also because the part of the brain that normally controls emotions can become damaged.

### How physiotherapy can help

I become involved in a client's rehabilitation journey when they have returned home from hospital or after spending several weeks in an inpatient rehabilitation unit. This can be quite an adjustment. I might be part of someone's life for a few weeks or for many months as they adapt to how their life has changed.

I usually treat people in their own homes, so the environment is meaningful to them. I have equipment I bring with me to help with their exercises and I tailor each person's exercise programme to what they want to achieve.

Everyone is different, and everyone has different goals. These can vary hugely in complexity, from re-learning how to stand up from a chair or being able to walk outdoors on uneven ground, to regaining enough fine motor skill to play a musical instrument again. Most people aim to be able to live as independently as possible. My responsibility is to help them get there.

Physiotherapists have the skill to use many different approaches to rehabilitation using functional electrical stimulation to generate muscle contraction, strapping or taping to improve alignment of the muscles and joints, working with a team to recommend splints and orthotics, designing a gym programme or using Pilates and this list is by no means exhaustive. Different techniques will suit different people depending on the type of stroke, the part of the brain affected and how active the person was before.

# Looking after your blood pressure to prevent stroke

High blood pressure is a wellknown and significant risk factor for stroke. Research shows that healthy eating, physical activity and medications to lower blood pressure can all help to prevent strokes. In my job, I use physical activity to help people recover from their stroke and reduce the risk of having another one. Keeping fit to keep your heart and blood vessels in good shape is not only important for preventing stroke, but for looking after your health and well-being overall. Being in good shape can

make recovery after a stroke more straightforward.

### Pushing the limits

One thing I have learned many times over is never to underestimate someone who is determined to recover. I enjoy being surprised by my clients' progress.

Over the years I have had the privilege of working with very many people who have inspired me. One lady had lost most of her vision and had a loss of sensation, weakness and changes in muscle tone down the whole of one side of her body. She had cognitive problems and difficulty with planning her movements. When she eventually arrived home from hospital, she was unable to even stand up. But she was always absolutely determined to be more mobile.

It took over a year, and a lot of hard work on her part, but she is now able to walk in her garden and attend a book group, amongst many other hobbies, which is huge in terms of quality of life. It is such a privilege to be part of that journey.

Marianne works in London for a private company, Eden Neuro Rehab, and for the Community Stroke Team at Guy's and St Thomas' NHS Foundation Trust.

# CHURCHILL (70), ROOSEVELT (63) AND STALIN (67) AT THE YALTA CONFERENCE, FEBRUARY 1945

NEWS BROKE OF ROOSEVELT'S DEATH

ROOS

AD

LORD MORAN, CHURCHILL'S PHYSICIAN

# How high blood pressure changed history

In February 1945, Joseph Stalin, Franklin Roosevelt and Winston Churchill met to discuss the strategy for the future of Europe. If Roosevelt had been in good health, might the history of Europe have turned out very differently? Professor Gareth Beevers takes a look at how high blood pressure may have defined modern Europe

Had Roosevelt

been his usual stubborn

self rather than the

exhausted, sedated and

dying man, might the

20th century have turned

out differently?

n the early months of 1945, the defeat of Germany in the Second World War was inevitable. The Soviet army was tearing across Poland and approaching the border. In the west, the British and American armies were rapidly advancing across Germany.

On the 4th of February, the leaders of the allied powers, Joseph Stalin, Franklin **Roosevelt and Winston** Churchill, met for a conference to plan the strategy for the future of Europe once hostilities had ceased. They met at history of Europe in the late Yalta, a town in the interior of the Crimea (then part of Russia), six hours by road from the nearest port. And there it was immediately apparent that Roosevelt was a shadow of his former self.

Churchill's physician, Lord Moran, wrote "the President appears a very sick man. He had all the symptoms of hardening of the arteries of the brain in an advanced stage, so that I give him only a few months to live". Averell Harriman, the US ambassador to

Moscow, commented later: "I was terribly shocked at the change since our talks in Washington after the November elections. The signs of deterioration seemed to me unmistakable".

The conference went badly. Stalin assured Churchill and Roosevelt that Poland would become a free and independent

> state. Roosevelt believed him, Churchill did not.

> > On the 12th of April, nine weeks later, Roosevelt suffered a massive stroke and died within the hour. The American newspapers reported that the stroke came as a total surprise. His personal physician, Admiral Ross T McIntyre, said the stroke

"came out of clear sky". Strangely, soon after, the President's medical records went missing.

### The silent killer

Only 25 years later did the facts become available. A cardiologist, Howard Bruenn, published his account of the medical events. He had first been called to see Roosevelt on the



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27th March 1944 on account of severe breathlessness. He diagnosed left ventricular failure (LVF) due to severe hypertension (high blood pressure).

LVF occurs when the left side of the heart fails to contract efficiently due to damage caused by high blood pressure. It becomes larger but weaker. The amount of blood the heart can pump out round the body is reduced and so blood accumulates in the ventricle and then in the left atrium above. The atrium also enlarges and blood then dams up in the pulmonary veins, which bring oxygenated blood in from the lungs. The lungs become congested and the patient develops breathlessness, particularly on lying flat, and attacks of breathlessness in the night. The patient feels exhausted as the ventricle fails to pump blood effectively around the body.

The President's blood pressure at this time was 230/120mmHg, sky high. His ECG, an electrical test of the structure and function of the heart, showed marked enlargement. Testing showed protein in the urine, indicating kidney damage. Soon after, Roosevelt complained of chest pain which almost certainly was angina, a symptom of narrowing of the coronary arteries which supply blood to the walls of the heart.

There were no antihypertensive drugs in those days and he was given phenobarbitone, a



tranquiliser, and digitalis leaf tablets to improve the function of the heart. The phenobarbitone must surely have contributed to his exhaustion.

Howard Bruenn saw the President within 15 minutes of the stroke, shortly before his death. His blood

pressure was 300/190mmHg. We now know that his blood pressure at the Yalta Conference nine weeks

### AN EARLY MERCURY BLOOD PRESSURE MEASURING SYSTEM

### AN ACCUSON MERCURY MANOMETER, C.1945 - 1955, SIMILAR TO THAT USED TO MEASURE THE PRESIDENT'S BLOOD PRESSURE

IMAGE COURTESY OF ©THE HUNTERIAN MUSEUM AT THE ROYAL COLLEGE OF SURGEONS

> earlier had been 240/130mmHg. In 1937, seven years earlier, it had been 163/98mmHg and it had never settled. At that time his personal physician, Ross McIntyre, had said the President's blood pressure was no more than one would expect in a man of his age.

#### **Conspiracy theories**

Historians, politicians, novelists and conspiratory theorists have continued to speculate on the outcome of the Yalta conference until this day. Had Roosevelt been his usual stubborn self rather than the exhausted, sedated and dying man, might the history of Europe in the late 20th century have turned out differently?

Roosevelt was acutely aware of the terrible casualty rate in the Soviet army as it drove the Nazis from the suburbs of Moscow, across Eastern Europe to the borders of Germany. Had the President been a fit man, might he have stood up to Stalin and refused to consent to the division of Europe into the eastern communist block and the democratic west, separated by what Churchill was later to call the iron curtain? Would Poland have become a western democracy?

The current consensus is that it was too late; Stalin had already taken Poland and was not going to allow it to join the west. Some have said it was Churchill's fault and that he had betrayed Poland. Even the levelheaded Howard Bruenn commented: "I have often wondered what turn the subsequent course of history might

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have taken if modern methods for the control of hypertension had been available".

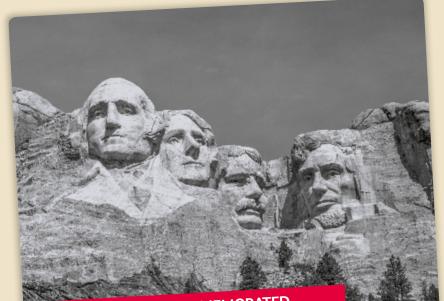
The lunatic wing of the American ultra-right are convinced that Roosevelt was murdered on Churchill's orders because of Roosevelt's opposition to the continued existence of the British Empire. They believe the president was poisoned by Elizabeth Shumatov, a Russian-born artist, who was painting a portrait of Roosevelt at the time of his collapse. It has been claimed that she was a British MI5 agent. The theory goes on to allege that the murder was organised by the much-loved children's author Roald Dahl, who was then the British assistant air attaché in our embassy in Washington.

### A new day in understanding high blood pressure

One consequence of Roosevelt's illness is, by contrast, not a matter of speculation. It was clear that there was a general state of ignorance on the significance of raised blood pressure. There simply were no data on the long-term outlook for such patients. Clinicians had their own theories but these were based on clinical anecdote rather than reliablycollected information from population-based follow-up surveys.

Roosevelt's successor and former vice president, Harry Truman,

determined that this ignorance should not continue. A \$500,000 grant was secured to conduct an epidemiological survey of the prognosis of different levels of blood pressure in the general population. The term 'epidemiology', once referred to the epidemics of infectious diseases like plague and cholera that swept across the world



PRESIDENT ROOSEVELT IS COMMEMORATED TO THIS DAY IN THE ICONIC MOUNT RUSHMORE, SOUTH DAKOTA (SECOND FROM RIGHT)

until the early 20th century. It is now used to describe the study of diseases in whole populations. Thus was born the

Framingham Heart Study, a communitybased long-term follow-up survey in the Massachusetts town of Framingham. This was the first and possibly the best of many studies which provide accurate information on the significance of normal blood pressure and of

mild, moderate and

Because of this study, we now understand that there is a direct relationship between the height of the blood pressure and risk of heart disease and stroke

severe hypertension, as well as other risk factors for heart attack and stroke including smoking, being overweight and obesity, diabetes and later cholesterol and its

good (HDL) and bad (LDL) components.

Because of this study, we now understand that there is a direct relationship between the height of the blood pressure and risk

It was clear that there was a general state of ignorance on the significance of raised blood pressure

of heart disease and stroke. Furthermore, people whose blood pressure was considered to be normal for their age were found to be at higher risk than those with below average pressures – the lower the blood pressure the

better.

Framingham also demonstrated the long-term consequences of an abnormal ECG, as was reported by Dr Howard Bruenn in President Roosevelt.

The Framingham project continues to this day and is the gold-standard for what we now call cardiovascular epidemiology.

Whatever were the causes and consequences of Roosevelt's stroke, many would say that the world saw the premature death of America's greatest ever president.

Professor Gareth Beevers is a Trustee and Medical Advisor for Blood Pressure UK. He is Emeritus Professor of Medicine, University of Birmingham and retired consultant physician, City Hospital, Birmingham.

# Be a part of Know Your Numbers! Week 2018

### We're on a mission to beat high blood pressure, and we need your help

very September, volunteers offer free blood pressure checks to unsuspecting passers-by at pop-up venues known as Pressure Stations. They appear across the UK, in train stations, shopping centres, car parks and supermarkets, even the Royal Opera House. The aim? To find the millions of people who have high blood pressure and don't know it.

Know Your Numbers! Week, is the UK's biggest blood pressure testing event, and we reach thousands of people every year.

Every year we have a different theme. We'll be announcing this year's theme in our August email newsletter, but we can give you a sneak peek: this year we'll be letting families know that we want ALL members of the family to get a blood pressure check, including children.

Blood pressure tends to rise with age, and we want younger members of the family to be aware of their health so they can look after it throughout their lives.

### Get involved

This year's campaign is going ahead from 10-16 September 2018, and we'd love your help

- Organise a Pressure Station Health and fitness professionals can run Pressure Stations, or you can organise one at your place of work.
  - **Spread the word** Tell your family and friends about why blood pressure matters and bring them along to a Pressure Station, or make a fuss on social media.
- Fundraise Collect donations, take part in a fundraising event or hold your own.
- **Put up posters in your local area** Get the word out to your neighbors with our eye-catching posters with details of the nearest Pressure Station.
- Write to your MP

MPs from all sides of parliament get involved, and their support can make all the difference. We can send you a template letter to help.

Find out more about all these options at www.bloodpressureuk.org/kyn or call us on 020 7882 6255 or email us at kyn@bloodpressureuk.org

# Meet the Trustees

Mark Caulfield is Professor of Cardiovascular Genetics and Director of the William Harvey Research Institute at Bart's Heart Centre and Queen Mary University of London and is one of our Trustees

### What have been the highlights of your career so far?

I wanted to be a doctor from the age of 12. I loved science, and medicine gave me a practical application for it which helps people.

I trained in general medicine and specialised in clinical pharmacology, the study of medicines and how they're used. I became a lecturer at St Bart's and started a research programme to understand the genetic basis of high blood pressure and how the research could be translated into better treatment for patients.

I was later made the Director of the William Harvey Research Institute (WHRI). I raised £25 million to grow the research centre, exploring new treatments for cardiovascular and other diseases.

I was president of the British and Irish Hypertension Society 2009-2011, and helped develop the 2011 NICE (National Institute for Health and Care Excellence) Guidelines which doctors use to diagnose and treat high blood pressure.

### What has been the most exciting research you've worked on?

In 1996, I coordinated a study of 2,700 people with high blood pressure, comparing their genes with 1,000 people who don't. We later began work on a map of the human genome looking for the genetic variations involved in high blood pressure. There are 20,000 genes in the human genome, coding for our individual

characteristics, but 3.1 billion letters in the entire genome.

There were a few years where we didn't find anything, but in a case of 'if at first you don't succeed', we kept

going, and in 2009 we found eight genes. It was a breakthrough. Then we found another 16 genes. Now my colleagues and I have identified over 500.

### What do the findings mean for patients?

Finding these genes gives us an opportunity for new drug targets, and we're currently working on new therapies. For example, we've found that 250ml of beetroot juice a day lowers blood pressure because it affects the nitric oxide pathway, and one researcher at the WHRI is working on developing it into a tablet.

### What are you working on now?

I'm Chief Scientist for Genomics England, overseeing the 100,000 Genomes Project. We're looking at the genomes of 100,000 people to find the causes of rare diseases, and we're looking at blood pressure as part of that. The aim is to transform the way people are diagnosed, and eventually treated.

Why is Blood Pressure UK important to you? They provide a voice for patients, which is really important. They link new research to patients and help them to understand their blood pressure and how to take action to help themselves.

We're looking

rare diseases

When we developed the NICE Guidelines, we included home monitoring for keeping an eye on your at the genomes of numbers. Many health professionals didn't 100,000 people to think people would find the causes of understand blood pressure, but they do. People come to clinic with their blood pressure for the

last three months recorded on their smartphones and say 'look, it's at target'.

When you are part of a process and you own that process, it's empowering. People connect with the information and use it to take control of their own blood pressure and their own health.

### How do you look after your blood pressure?

When I'm not busy I enjoy walking in the countryside with my dog, Ron. The best advice I can give is to make sure you do some exercise, stop adding salt to food, eat more green leafy veg and perhaps a glass of beetroot juice a day. Take your medicines and remember the reason you're taking them

The secret of successful healthcare in the future will be in all of us staying healthier for longer – the more we do to take care of ourselves the better.



# Take the heat out of summer with these cooling, LOW SODIUM fajitas

Pack a flavour punch with this pleasing recipe, perfect for a light dinner or for lunch.

### Open Mexican Sweet Potato & Avocado Fajitas

### Serves: 4 Prep: 20 mins Cook: 20 mins

500g sweet potatoes, diced 1 red pepper, diced 1 onion, cut into chunks 1 tsp LoSalt 1 tsp mild chilli powder 1 tsp dried oregano 1/2 tsp smoked paprika 1 clove garlic, chopped 1 tbsp olive oil 28g pack fresh coriander, chopped 3 tomatoes, chopped 4 spring onions, sliced 4 wholemeal flour tortillas 1 ripe avocado, mashed 4 heaped tsp reduced fat soured cream

- Preheat the oven to 200°C, gas mark 6.
- Place the vegetables in a roasting tin.
  Mix together the LoSalt, chilli powder, oregano, paprika and garlic and toss into the vegetables with the oil. Roast for 20 minutes until tender, stir in half the coriander.
- Mix together the tomatoes, spring onions and remaining coriander.
- Heat the tortillas according to pack instructions and spread with the avocado, top with the roasted vegetables and then tomato salsa and serve with a spoonful of soured cream.



Visit losalt.com for many more delicious recipes

available from most UK supermarkets

# Helping others with High Blood Pressure

Have you thought of Blood Pressure UK in your Will?

Finding out that you have high blood pressure is traumatic, particularly if you are young. Most people don't know anything about the condition and worry about how it will affect themselves and those around them. But Blood Pressure UK is here to help, and with our



information packs, range of leaflets and our helpline, we provide reassurance and support to sufferers and their families. But all of this work is expensive and while membership subscriptions and general donations help enormously, leaving a gift in your Will can help us make a bigger difference.

It isn't as complicated as you might think, doesn't have to be a large amount, and will give you the reassurance that our work helping fellow sufferers will continue once you have gone.

Obviously, providing for your family and friends comes first, but once that is done please consider a gift to Blood Pressure UK in your Will. We have put together a simple leaflet to guide you through the process and you can get a copy by telephoning: (020) 7882 6255, visiting the website: www.bloodpressureuk.org, or by writing to: Blood Pressure UK, Wolfson Institute, Charterhouse Square, London, EC1M 6BQ.

Looking to reduce your salt intake without compromising on taste? Excess dietary salt is one of the most important modifiable risk factors for high blood pressure. **Switching to LoSalt**, the UK's number 1 reduced sodium salt will help you to maintain normal blood pressure.



...try switching to the original and best reduced sodium salt

For more information and delicious recipes to try at home, visit **losalt.com** 



The perfect blend of 2 natural mineral salts, LoSalt is the healthier alternative for seasoning, cooking and baking without compromising on flavour.

And its simple to use...if your recipe requires 1tsp salt, use 1tsp LoSalt: it does the same, **tastes the same and** has 66% less sodium!

LoSalt, the natural choice for your table and kitchen cupboard





# **Information & publications**

Co musisz wiedzieć

o nadciśnieniu?

La tensión

arterial alta

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We have a range of booklets and fact sheets giving valuable information about living with high blood pressure to help you understand it, lower it and manage it.

ਹਾਈ ਬਲੱਡ ਪ੍ਰੈਸ਼ਰ ਬਾਰੇ

ਜਾਣ-ਪਛਾਣ

With great thanks to the Big Lottery Fund, we have been able to translate our award winning 'Introducing high blood pressure' leaflet into 32 languages.

# Introducing high blood pressure

This booklet explains what high blood pressure is, who gets it and why. It gives basic information on lifestyle changes to lower blood pressure, and about measuring your own blood pressure at home.



All these publications and more are free to Blood Pressure UK members. Visit www.bloodpressureuk.org