the magazine of Blood Pressure UK ISSUE 40 > WINTER 2016

NINE OUT OF 10 STROKES ARE PREVENTABLE

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New research inspires our 2017 campaign to prevent stroke

#### SYSTOLIC VS DIASTOLIC

POSITIVE

Which is more important? We take a look at the debate



#### THE YOGA EFFECT

The gentler way to lower your blood pressure

#### FINDING THE SILENT KILLER

Know Your Numbers! Week 2016 reaches the undiagnosed



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pressure is 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. Patron

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## Welcome

#### From Katharine Jenner, Chief Executive Officer

This summer a new study found that nine out of 10 strokes could be prevented. Although it's shocking to think how many strokes needn't have happened, there is a brilliantly positive message here – we can all lower our chances of having a stroke. Dramatically. That's why in 2017 we're focusing on preventing stroke.

The research highlighted 10 causes, or risk factors, we can take control of – including lowering blood pressure, being more active, losing weight and stopping smoking. Unsurprisingly, all these changes can work together to help each other – losing weight will help lower blood pressure for example – and perhaps more importantly, will lower the chances of other health problems like heart disease and dementia as well. By making changes, we can look after our hearts, our bodies and our minds.

One person making a change this year is my husband, JP. Last year we had our first baby, Sylvia, and JP has realised how much he wants to be there to see her grow up. He's taking his running to the next level and preparing for the London Marathon. Read how he's getting on on page 18.

There are so many things we can't change, sometimes it's easy to forget how much we can. My favourite health tip I heard this year was 'find cheerleaders'. If you're planning to make a change, whether it's to run a marathon or give up smoking, lose half a stone or drink less, make sure you have people on your side, cheering you on. Tell your friends what you want to achieve, and give them a call when you need an extra push. And if you need someone in your corner to help you lower your blood pressure, don't forget, our healthcare team is only a phone call away.

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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

#### HEARING FROM THE EXPERTS

Our Chief Executive Officer (CEO), Katharine, travelled to the beautiful Dublin town of Dun Laoghaire for the British Hypertension Society's Annual Meeting

in September. Professor of Preventive Cardiovascular Medicine, Neil Poulter, discussed the effects of taking antihypertensives at different times of day, and Professor of Cardiovascular Medicine & Epidemiology, Franco Cappuccio, talked about how low salt saves lives. There were also a great many interesting papers on dietary nitrates - more of which in the next Positive Pressure.

#### **REACHING OUT TO LONDON'S SENIOR RESIDENTS**

Katharine spoke at a Kensington and Chelsea Forum for Older Residents event this November, letting senior residents of the London borough know it's never too late to reduce their risk of having a stroke or a heart attack.



#### **FEELING GOOD IN** BOREHAMWOOD

This August, our Marketing Manager, Hemini, and Trustee, Nirmala, were busy checking blood pressures and offering information and support at Feel Good in Borehamwood Health and Wellbeing in Hertfordshire an event for the local community, keeping people fit and well in body and mind.

## Letters our healthcare team is here to help

Dear Blood Pressure UK, I am 71 years old and have had occasional elevated blood pressure for about 20 years and am on 5mg of the ACE inhibitor, Ramipril. When my readings are taken at my surgery they are around 150-160/80mmHg. Home readings are normally under 130/75mmHg so I know I am a 'white coater'.

Your recent article by Prof Gareth Beevers suggests that we should be aiming for 120 systolic, but my surgery says they are happy with 150. Further, they take three readings and go for the lower one. Why is this? Thanking you in anticipation, Nigel

#### Dear Nigel,

It's good to know that you're keeping an eye on your blood pressure at home. The reason we do three readings is because so many patients have a 'white coat' reaction and their first reading is often raised – even in people with blood pressure in the normal range. So we take three readings and leave out the first one, then average the second and third.

The cut off point for a diagnosis of high blood pressure is 140/90mmHg, and that's the point beyond which treatment is advised, but many GPs accept 150 systolic as a controlled level. That's because when the National Institute for Health and Care Excellence (NICE) audit GP practices, they set the target for controlled blood pressure at 150/90mmHg.

This year, a large study, known as the SPRINT Trial, found that people who had their systolic blood pressure lowered to 120 had a lower risk of heart disease and stroke compared to people who had theirs lowered to 140. This is why Professor Beevers suggests aiming for 120, and why we think all the guidelines, including those from NICE, will be updated in time. With best wishes, The Blood Pressure UK healthcare team

## **Blood Pressure NEWS**

#### NEW RESEARCH SUPPORTS THE SAFETY OF STATINS

#### Researchers have said the benefits of statins far outweigh any possible side effects

The researchers wanted to investigate the effects and safety of statins in people with or at risk of cardiovascular disease (including heart disease and stroke). They looked at all the high-quality studies of people using statins that have been done over the last 30 years and found very few side effects in relation to the number of lives saved.

The research follows reports earlier this year on the temporary drop in statin use in 2013, following a period of controversy in the media – where the safety and benefits of statins were widely debated.

Statins are widely recommended to treat people in the early stages of cardiovascular disease or who are at risk of developing it. They work by lowering blood cholesterol. Whether you take statins should always come down to a discussion between you and your GP and what's right for you.





#### **BLOOD PRESSURE AND DEMENTIA** ANOTHER PIECE OF THE PUZZLE

## New research points towards high blood pressure as a cause of vascular dementia

In our feature, *Healthy body, healthy mind*, in our summer issue of *Positive Pressure*, our guest writers explained we still have a lot to learn about the causes of dementia. There is clearly more than one cause, and diabetes, obesity, physical inactivity, smoking and high blood pressure are among the known risk factors.

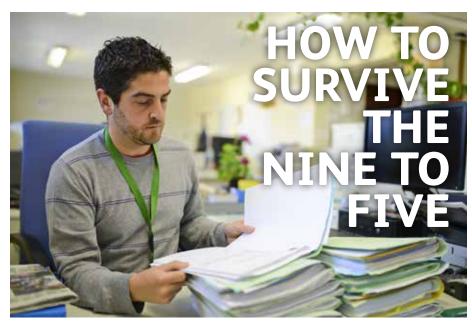
This summer, a study of over 4 million people found that people with high blood pressure are more likely to develop vascular dementia – the second most common type of dementia after Alzheimer's disease. Interestingly, the risk was different at different ages. High blood pressure was linked to a 62% higher risk in people aged 30-50, a 26% higher risk in those aged 51-70, and had no effect in people over 70.

#### This study tells us three important things

- If high blood pressure really does cause vascular dementia, and this wasn't just a chance finding, lowering blood pressure could mean far fewer people facing vascular dementia.
- 2 Even at an older age, lowering blood pressure is unlikely to cause problems – previous research has suggested that low blood pressure in people over 70 could be linked to dementia.
- **3** Stroke and mini stroke (known as TIAs) are known risk factors for vascular dementia, but only a third of those with vascular dementia in the study had

experienced these. This suggests that blood pressure plays an important role, and reducing blood pressure in the population as a whole will have the greatest impact.

It's reassuring to know that a good public health programme to lower the nation's blood pressure could lead to fewer people facing vascular dementia as well as heart disease and stroke in later life. Taking care of yourself and your blood pressure, whatever your age, will help you live longer and stay healthier later on. Have a look at page 11 for ideas.



Research published this summer brought good news and bad news for office workers A new study of over a million people found that those who were least active and sat for long periods throughout the day faced serious consequences for their health and had the highest chance of dying during the study. But those who exercised the most offset this risk and, importantly, even a little exercise helped.

Interestingly, this summer, a different study of more than 150,000 people compared different methods of getting to work and obesity levels. Unsurprisingly, those who cycled or walked to work had less body fat and lower body mass index (BMI, a measure of overweight and obesity) than those who drove or took public transport.

Not only that, another report found that long commutes lead to more snacking and leave us with less time for exercise, and could even raise our blood pressure.

It can be tricky to fit exercise into our daily routines, so cycling to work or getting off the bus a stop early seem like excellent ways to fit in the recommended 30 minutes a day.

#### THE DIPS THAT ARE AS SALTY AS CRISPS

#### Despite being widely thought of as guilt-free snacking, a new survey has exposed 'healthy' dips as salt and fat traps

Campaign group Consensus Action on Salt and Health (CASH) surveyed more than 200 dips from well-known supermarkets, and houmous, guacamole, salsa, tzatziki and taramasalata were all put to the test.

Taramasalta was the saltiest on average. 100g of Marks & Spencer's Taramasalata contained a massive 1.5g of salt – that's a quarter of your daily 6g salt allowance, and as much salt as four packets of crisps. Although the most popular product, houmous was far from the healthiest – not one of the 108 options had a green label for salt.

Dips add more than just salt to your vegetable sticks. Over a fifth had a red label for saturated fats, and a portion of



Waitrose Cheese and Chive dip contains more total fat than a Big Mac.

But not all were so bad. Salsa was the least salty dip overall, averaging less than half a gram of salt per 100g, and sour cream options could be as low as 0.25g.

Food companies need to take action and reduce the salt and fat in their products. Encouragingly, the Senior Nutritionist at Waitrose has already stepped forward to say "Salt and fat reduction is a top priority for us... and we are already reviewing our range of dips for 2017".

#### Top tips for healthier dips

- Be label savvy: Don't be fooled by 'low fat' labels – the salt content could still be high. Compare a few options before you choose one.
- **Get digital:** The FoodSwitch app compares products to help you find the healthy options.
- **Play it safe:** Salsa and vegetablebased dips tend to have the least salt and fat.
- Check your portion size: You'll probably wind up eating more if you eat straight out of the container, so pop some on your plate first.
- Watch what you dip in your dips: Vegetable sticks and low salt crisps and crackers are the kindest on your waist line and your blood pressure, and there are lots to choose from.
- Get creative and make your own: Rustle up a tzatziki with some low fat yogurt, cucumber and mint, or a chunky salsa with some tomatoes, onion, chilli and herbs.

NEWS <

## D FOR PUBLIC

#### The Government's long-awaited plan to reduce childhood obesity is disappointingly weak

Nearly a third of children are overweight or obese, and this August the Government published their plan to tackle the problem. For over a year, numerous health charities including our sister charity Action on Sugar have published evidence-based strategies that would prevent obesity, type 2 diabetes, heart disease and stroke, and campaigned for the Government to adopt them. Unfortunately, they were ignored.

The failings of the new plan are in spite of the fact that a leaked draft of the report was publically slammed in July for being far too unambitious. Not only was the plan not strengthened, it was weakened. Most importantly, there is no mention of restricting advertising aimed at children or cut-priced promotions for products high in sugar, salt and saturated fat.

#### The plan misses the point, with flimsy calls for sugar reduction and more sport in schools

The charities' calls for action included demands for food and drinks companies to dramatically reduce the sugar and fat in foods and soft drinks. a 20% tax for

and food companies on sugary drinks and sweets, and clearer food labelling.

The final plan, however, included no particular plans for food labelling, and only voluntary targets to reformulate foods so that they contain 20% less sugar. There is no mention of fat, and only a vague mention of 'levers' to be put in place as far away as 2020 if companies don't respond.

The plan also puts much of the onus on schools and public sector services, such as sports centres, to provide more opportunities for sport and healthy food choices. Katharine Jenner, CEO of Blood Pressure UK, explains "Exercise and healthy



The Guardian – Childhood obesity: UK's 'inexcusable' strategy is wasted opportunity, say experts

Sky News – Jamie Oliver says obesity plan 'underwhelming' and 'disappointing'

Financial Times – A plan that fails to tackle UK childhood obesity

Just Food – Why England's child obesity plan is best industry could have hoped for

The Wall Street Journal – U.K Plan to cut sugar use fails children, say critics

eating are essential for our health, but promoting extra sport in schools won't have the same impact as the changes public health charities demanded - such as banning the sponsorship of unhealthy food and drink brands at large sporting events such as the recent Olympics."

#### The plan will not tackle the economic challenges for the NHS

The plan concludes: "We are confident that our approach will reduce childhood obesity while respecting consumer choice, economic realities and, ultimately, our need to eat". But the stark reality is that this plan will not reduce childhood obesity, or tackle the economic challenges that the NHS is currently facing due to the consequences of an unhealthy diet.



Professor Graham McGregor, Chairman of Blood Pressure UK, explains "The plan won't lead to the reduction in calories needed to make an impact. The Government has shied away from demonstrating that public health and childhood obesity are a priority for them. This is an unforgivable missed opportunity to launch what should have been one of the UK's most important public health

programmes – tackling high blood pressure, high cholesterol and obesity, and the unnecessary consequences for our health.

## CHARITIES PULL TOGETHER FOR WORLD HEART DAY

## UK charities raise awareness of heart disease and stroke and announce their plans to prevent them

29 September was World Heart Day – the world's biggest platform for raising awareness and funds for heart disease. The charity, Heart Research UK, encouraged people of all ages to find out what they can do to love their hearts and host events around the country to raise awareness and raise funds. Meanwhile, Public Health England launched their new action plan for preventing heart disease and stroke, and refreshed their online tool that takes a look at the health of your heart.

Around 7 million people in the UK are affected by cardiovascular disease Cardiovascular disease is a family of health problems which involve the heart and blood vessels, such as coronary heart disease and stroke. They can have a serious impact on people's well-being, and can be fatal.

Fewer people in the UK have died from cardiovascular disease over recent years. This August, a major review of cardiovascular disease in Europe has found that it is no longer the main cause of death in the UK. It's not possible to know for sure what's behind this, but it shows the potential that better healthcare and campaigns for prevention can have.

**THE ACTION PLAN** Public Health England have launched a new plan to help prevent these problems and support people living with them.



Primary prevention helps people to change their lifestyle to lower their risk of developing cardiovascular disease. For example, with campaigns such as Stoptober, giving people a push to stop smoking, and Change4Life and One You, giving people the tools they need to eat well and be active.



Secondary prevention aims to pick up on and treat health problems while they're still in the early stages. For example, the NHS Health Check. This is a free health MOT for people aged 40-74 which can detect problems such as high blood pressure and high cholesterol before they lead to something more serious. Tertiary prevention aims to reduce or prevent further health problems in people who already have cardiovascular disease and symptoms. For example, supporting the NHS in providing specialist services, and advising local authorities on the best way to care for patients.

#### DO YOU KNOW YOUR HEART AGE?

NEWS -

The online tool that takes a look at the health of your heart

To celebrate World Heart Day, the NHS, Public Health England and the British Heart Foundation updated their online calculator that estimates your heart age.

To find out how your heart age compares to your actual age, simply enter a few details about yourself, such as your age, height, weight, blood pressure and cholesterol. The new version allows you to change aspects of your lifestyle, for example stopping smoking, to see how this lowers your heart age. Plus, get information about how to look after your heart that's tailored to you.

Find out your heart age at www.nhs.uk/ tools/pages/ heartage.aspx

# Good things come in threes

New research highlights three things we should all be eating more of

#### THE MEDITERRANEAN DIET

A recent Italian study has found that people with cardiovascular disease lived longer if they ate a Mediterranean diet. Those who stuck most closely to the Mediterranean diet had a 37% lower chance of dying during the seven year study. This backs up the existing research showing a Mediterranean diet is beneficial in the general population who don't have signs of cardiovascular disease.

Eating a Mediterranean diet is a great way to improve your diet and your health, even if you have already had a heart attack or stroke. Choose more: fruits, vegetables, oily fish, whole grains, low fat dairy products and olive oil instead of saturated fats.

Choose less: processed foods, meat, full-fat dairy products and saturated fats like butter.

#### WHOLEGRAINS

A recent study of almost 800,000 people found that those who ate the most wholegrain foods had better long-term health and lived longer than those who ate the least - wholegrains appeared

to protect against death from heart disease and stroke. The authors suggested wholegrains lower blood pressure and blood cholesterol, and help prevent type 2 diabetes, plus they keep you feeling full for longer, so you're less likely to snack.

Wholegrains are grains that have not been processed to remove the outer layer - where a lot of the nutrients are. This study adds to the evidence that wholegrain foods are an important part

of a heart-healthy diet.

'whole wheat',

'wheatgerm' or

'wholegrain'

ALL NATURAL. Choose more: foods with words like 'whole oat' on the label.

> **Choose less:** refined grains or foods made with them. like white bread. rice and pasta.

#### **OMEGA-3S**

There has been conflicting evidence about whether Omega-3 fats, found mainly in oily fish, play a role in preventing heart disease. Partly because most studies have relied on people estimating how much fish they

eat, which isn't a reliable measure of how much they eat in reality.

Now, a large new study has looked at the levels of Omega-3 fats in blood which is much more reliable. The research combined the results of 19 studies from around the world, including nearly 46,000 people, and found that people with the highest amounts of Omega-3s in their blood had a 10% lower risk of dying from a heart attack during the length of the studies.

Omega-3s are a type of unsaturated fat which can be found in oily fish, as well as some plant foods, such as rapeseed oil. Aim to eat oily fish at least once a week as part of a healthy diet. Eat more: Pilchards, mackerel, salmon, sardines and fresh tuna (not tinned).

## After new research reveals nine out of 10 strokes are

**preventable** we launch our campaign to prevent stroke.

his summer, an important new study found that nine out of 10 strokes could be prevented. The INTERSTROKE study, published in the well-known scientific journal, *The Lancet*, included 27,000 people in 32 countries around the world. By comparing the lifestyles

of people who've had a stroke and people who haven't, the researchers

revealed the top 10 risk factors for stroke – including high blood pressure, smoking, an unhealthy diet and lack of exercise.

Strokes are a major health problem in the UK. Every year around 110,000 people in England have a stroke. It's the third biggest cause of death after cancer and heart disease. Although it's shocking to think of the number of strokes that could have

been prevented, it's heartening to know that 90% of strokes could be prevented in the future. That's why in 2017 we're going to launch a UK-wide campaign to let people know they can lower their risk of stroke, and how.

Of the ten risk factors highlighted by the study, high blood pressure was the most important. Although it's not widely known, high blood pressure is responsible for roughly 60 % of all strokes. This means at least six in

ten strokes could be prevented if blood pressure alone was

High blood pressure is responsible for roughly 60% of all strokes. This means at least six in ten strokes could be prevented if blood pressure alone was managed to a healthy level.

managed to a healthy level. As high blood pressure has no symptoms, it is known as the silent killer, and often the first symptom of high blood pressure is a stroke. One of the simplest ways to lower blood pressure is through a healthy diet including eating less salt, and being active. We want

to reach the millions of people who don't know they have high

blood pressure and nudge them towards getting their blood pressure checked and taking steps to improve their health.

#### Our campaign

We're going to launch our stroke prevention campaign during Salt Awareness Week in March 2017

We want to raise awareness of high blood pressure and the health problems it causes – in particular, that it's the single biggest risk factor for stroke. Making the consequences of high blood pressure known could resonate more with people than focusing on high blood pressure alone, inspiring people to change the way they approach their health.



#### How we're going to start

Team up with other charities to get the message to as many people as possible. Work with food companies and celebrity chefs to develop low salt menus and recipes for Salt Awareness Week. Launch our Cook Challenge to encourage bake-off style competitions in workplaces around the country, where staff compete to see who can cook the tastiest meals, using LoSalt or no salt at all. Make the most of Caribbean flavours by working with chefs and nutritionists to produce

recipes and offer advice. So people can create popular Caribbean meals at home without the salt. Create a user-friendly guide to eating less salt, covering the foods that are high and low in salt, and tips on reducing salt intake. Make high blood pressure front page news, demonstrating the little known effects of high salt intake and high blood pressure with news stories that capture the imagination.

We want to reach the millions of people who don't know they have high blood pressure and nudge them towards getting their blood pressure checked.

# LOWER YOUR RISK OF STROKE

We can't change our genes, our age or our gender, but we can still take control of our health. Here's how you can take on the 10 risk factors for stroke, one by one.

Look after your blood pressure

High blood pressure is the

main preventable cause of stroke. The NHS uses 140/90mmHg as a cut-off point, but there could be added benefits of aiming for 120 systolic. For every 10mmHg drop in systolic blood pressure, you can lower your risk of coronary heart disease by 20% and heart failure by 28%.

Being active lowers blood pressure by keeping your heart and arteries in good condition, and being the right weight lowers blood pressure because your heart doesn't have to work so

hard. One of the simplest changes you can make is eating less salt, as well as more fruit and vegetables and watching how much alcohol you drink. Find out more from www. bloodpressureuk.org or call 020 7882 6255.

Stop smoking Kicking the habit brings health benefits straight away, no matter how long you've smoked for. You'll lower your blood pressure,

breathe more easily, feel fitter and be able to taste more. You're four times more likely to quit for good if you have help, and there's lots of help available.

> There are free, local, face-toface Stop Smoking Services all around the country, as well as phone and online chat. Plus there are a range of products and medicines available to curb your cravings such as e-cigarettes, nicotine patches and inhalers, as well as Quit Kits,

e-cigarettes, nicotine patches and inhalers, as well as Quit Kits, mobile phone apps and email and text support. Find out more online from quitnow.smokefree.nhs.uk or call the Smokefree National Helpline on 0300 123 1044, or visit your GP.

Watch what you drink Alcohol has a surprisingly big impact on blood pressure – it's linked to a fifth of cases of high blood pressure. Be aware of how much you drink, and try to cut back if you often have more than 14 units a week. That's the same as six pints of average strength beer or 10 small glasses of low-strength wine.

There are easy ways you can cut back on alcohol without cutting it out completely. For example, try having a couple of alcohol-free days every week, swap strong beers for weaker ones, choose bottles instead of pints or a small glass instead of a large one. Drinking less is good for your heart, liver, blood pressure and your risk of stroke, and it could improve your mood and help you sleep better so you wake up full of beans. There is support available if you need it. Visit www.nhs.uk/ Livewell/alcohol/ or your GP, or call Drinkline for free on 0300 123 1110.

#### Find out if you have type 2 diabetes

Like high blood pressure, diabetes is a silent killer – as it has no symptoms. In fact, 5 million people have diabetes and don't know about it, so they aren't getting the treatment they need to prevent problems later in life, including sight loss, kidney problems and stroke. A free NHS health check is a good way to find out if you have diabetes or the early signs of it.

And just like lowering high blood pressure, being a healthy weight, eating well and being active can lower your risk of type two diabetes. Visit www.nhs.uk/Tools/Pages/Diabetes. aspx to see if you're at risk of diabetes, or visit your GP.

#### Eat well

Eat less than 6g of salt a day for the simplest way to lower your blood pressure and your risk of stroke. Most of the salt we eat is already in the foods we buy, like bread, breakfast cereal, sandwiches, sauces and soups, so check the labels to find the best options, or use our FoodSwitch app which compares products for

you. Keep an eye on foods high in sugar and saturated fat too – they both add calories but very few nutrients, leading to weight gain, high cholesterol and diabetes.

It's not all about cutting out foods, but about adding in lots of wholegrains and fresh, frozen or tinned fruit and vegetables as well. It can be cheaper, easier and more fun than you think. Find a whole range of tips and recipes from our website and www.nhs.uk/ livewell

#### Lower high blood cholesterol

For every 1mmol/L reduction in total cholesterol, you could lower your risk of heart disease and stroke by a quarter. Fats and sugars in the food we eat are repackaged into blood cholesterol by the liver. It's normal and healthy to have cholesterol in your blood, but too much can raise your risk of stroke and heart disease.

You can lower your blood cholesterol, if you need to, with a healthy diet and exercise. Try to eat less saturated fat, this includes animal fats like butter, cheese, full fat dairy products and meat. If necessary, medications such as statins can help. Find out more from www. nhs.uk or speak to your GP.

#### Get active

It's never too late to get active and there is lots of help available. Couch to 5K is a plan to help absolute beginners gradually build up to running five kilometers. Have a look at www. nhs.uk/couchto5k

You could also take up the 10,000 Steps Challenge, where you aim to walk 10,000 steps every day, or go for 10 minute workouts you can do at home to fit exercise into your day. Or try something new. Just visit www.nhs.uk/oneyou/ moving for ideas. As well as preventing serious health problems, being active can make you feel full of energy and lift your mood too. Check with your doctor or nurse before starting a new type of exercise. They can also tell you about leisure

centres and walking

paths in your area.

#### Keep to a healthy weight

To stay as healthy as possible, your waist size should be no more than 94cm (37ins) for men, and 80cm (31.5inches) for women, and your BMI should be under 25. BMI, or Body Mass Index, is a measure of whether you're a healthy weight. You c an find an online BMI calculator at www.nhs.uk/Livewell/ loseweight/Pages/ BodyMassIndex.aspx along with lots of advice on losing weight safely.

Losing weight if you need to will help to reduce your blood pressure and the risk of many other health problems including stroke. Being active and eating well are the simplest ways to get to or maintain a healthy weight and there is lots of support available. Try some of the ideas suggested here or visit your doctor or nurse. **Look after your heart** A healthy lifestyle, such as not smoking, being active and being a healthy weight can all lower your risk of heart problems, and in turn can lower your risk of stroke. Some heart problems are not linked to your lifestyle, but they can also lead to stroke. For example atrial fibrillation and atrial flutter, where the heart beat is too fast or irregular. Atrial fibrillation often has no symptoms so you might not be aware of it. In fact, around a third of atrial fibrillation is undiagnosed.

Treatment with medications greatly reduces the risk of stroke. If everyone with atrial fibrilation at high risk of stroke received the right medications, 11,600 strokes could be prevented every year in the UK.

Visit your GP to have your pulse checked and ask about the health of your heart. An NHS healthcheck can help you make sure your body's most import systems are running smoothly and spot any potential problems, and you can get personalised information on keeping yourself healthy. They're free to everyone aged between 40-74 eligible for a free health check. Read more at www.nhs.uk/oneyou/checking#

#### Find ways to relax

A bit of stress is normal and can help push you to do something new or difficult, but feeling under too much emotional or mental pressure for too long can take its toll on your health. Stress doesn't only affect your mood, but how much sleep you get and your body too. If it's not under control it can even lead to serious illnesses. Look out for the early signs of stress – like sweating, loss of appetite, headaches, poor concentration and feeling irritable or worried – so you can find ways to manage it.

Take control by learning to manage your time, finding ways to relax, talking, and exercising regularly. Mindfulness and mediation exercises and courses can lower your stress levels. Even singing and volunteering can help. To find ideas to suit you plus audioguides to boost your mood, have a look at the NHS Moodzone at www.nhs.uk or visit www.mind.org.uk for information about mental health, and visit www. stepchange.org if you have money worries. You can also visit your GP.



Dr Matt Kearney, NHS England



Jamie Waterall, Public Health England



Duncan Selbie, CEO of Public Health England



Jenny Rosborough, Action on Sugar

Blood Pressure UK's Katharine Jenner

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Michael K Brodie, Public Health England



Prof Kevin Fenton, Public Health England



Celia Ingham Clark, MBE, NHS England

Jamie Waterall, National Lead for Cardiovascular Disease Prevention at Public Health England, said: "Getting a blood pressure check is particularly important for people over the age of 40, when cardiovascular risk generally increases. Know Your Numbers! Week is a fantastic prevention initiative. We are happy to be supporting this by setting up blood pressure stations for staff to use in some of our PHE

> sites." MPs joined the call to get tested and visited Pressure Stations in their constituencies. Sadiq Khan, the Mayor for London, wished us "every success with raising awareness of this important campaign". Meanwhile, star of hit

TV show Gogglebox, Viv

We reach out to **risk-takers** 

MPs, health professionals and celebrities help us spread the message: Are you a risk taker? You are if you don't know your numbers

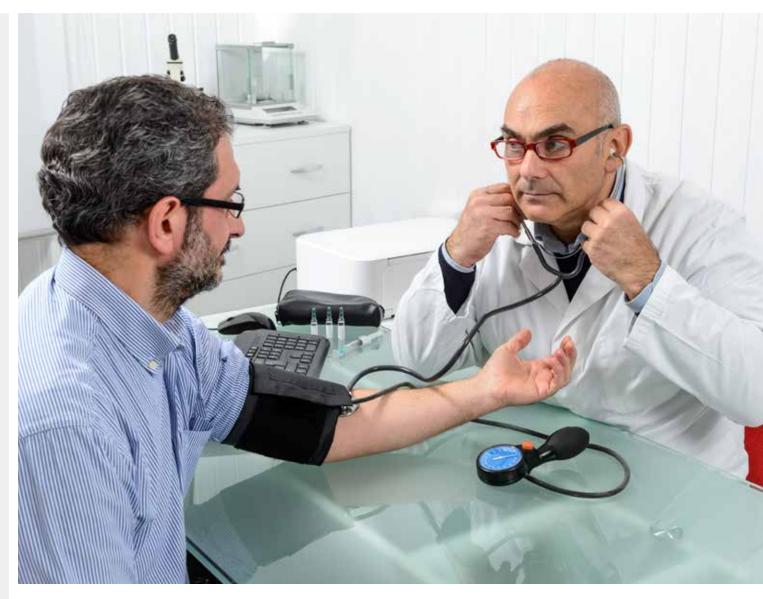
his September, Pressure Stations up and down the country offered free blood pressure checks for Know Your Numbers! Week, our flagship annual campaign.

As high blood pressure has no symptoms, the only way to know you have it is to have your blood pressure checked. So, with a little help from our friends, we reached out to those who don't know their numbers. Thousands listened, getting a free check and health advice at Pressure Stations at The Royal Opera House, the Port of London Authority, and hospitals, universities and pharmacies across the UK.

We revealed research from Public Health England showing that 5 million people in the UK have undiagnosed high blood pressure. If everyone had a blood pressure check each year, a staggering 45,000 heart attacks or strokes could be prevented over the next ten years, saving £850million in NHS and social care costs. The research also highlighted regional hotspots – areas with the highest numbers of high blood pressure – including Wyre Forest, Birmingham, Leeds and County Durham. Woerdenweber (pictured, left), had her blood pressure checked and urged local residents in Wirral to do the same.

Extensive media coverage in The Daily Mail, The Sun, Metro and The Mirror helped spread the word along with dozens of stories on local radio and newspapers. Social media played an important role too this year. Claire Parker, Director of Parker Healthcare Ltd, ran a Pressure Station and took to twitter saying "It was great to be involved – what a fantastic campaign."

Thank you We would like to say a huge thank you to all the health professionals and loyal supporters who took part in and talked about the campaign. Thank you to those who hosted Pressure Stations, including: EDF Energy, Bromley Healthcare, One You Ealing, Boots UK and Healthy Living Pharmacies. Also to the MPs who supported the event: Derek Thomas, MP for St Ives, Graham Evans, MP for Weaver Vale, Dr James Davies, MP for Vale of Clwyd, Cllr Achilleas Georgious, Deputy Leader of Enfield Council, Jenny Chapman, MP for Darlington, Rachael Maskell, MP for York Central, Andrew Bridgen, MP for North West Leicestershire, and Daniel Zeichner, MP for Cambridge.

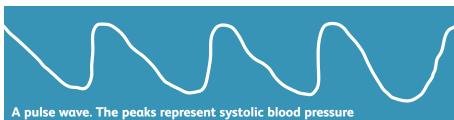


## WHICH MATTERS MOST, SYSTOLIC OR DIASTOLIC?

The relative importance of systolic versus diastolic blood pressure has long been a source of debate and confusion. Professor Gareth Beevers investigates The heart pumps intermittently so that, when the left ventricle contracts, blood is squirted through the aorta and around the body. The ventricle then relaxes to allow it to be refilled with blood returning from the lungs.

This contraction and relaxation can be detected easily in the pulse at the wrist, just below the thumb. Hippocrates, the Greek physician often referred to as the Father of Modern Medicine, and the other ancients had noted that a large volume pulse (a pulse that can be felt very strongly) was a predictor of ill health, but there was no reliable system for measuring it.

In the 19th century, several clinicians – notably including Frederick Akhbar Mahomed in London – studied the pulse wave form with increasing accuracy. They designed instruments to measure the waves of pressure against the walls of the arteries while the heart contracts and relaxes, creating an



and the troughs represent diastolic blood pressure.

image of this wave of pressure, or pulse wave. They were able to identify both the systolic pressure (or peak output pressure) and the diastolic pressure (or trough pressure). Whilst these findings were scientifically interesting, there remained no simple method of measuring blood pressure.

#### Breakthrough

The breakthrough came in 1896 when the Italian physician Scipioni Riva-Rocci invented the first modern blood pressure machine. An air-filled cuff was wrapped round the upper arm and attached to a glass mercury-filled column. The cuff was then inflated and, as the air left the cuff and the pressure in the cuff was reduced, the pulse at the wrist could now be felt – this represented the systolic blood pressure.

Nine years were to elapse before the Russian Army surgeon Nickolai Sergeivich Korotkov devised a method of measuring the diastolic blood pressure (DBP) – by listening to the artery at the front of the elbow with a stethoscope while the cuff deflates. Thus it became possible for both systolic and diastolic blood pressure to be measured with ease.

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Things came to a head when, four weeks before the end of the Second World War, the President of the United States, Franklin Delano Roosevelt, died of a massive stroke. His physician, Ross McIntire, told newspapers that this had come as a total surprise. It was not until 25 years later that clinical details were published, showing that two months before his stroke Roosevelt's blood pressure had been 240/130mmHg – sky high.

#### The risks of high blood pressure finally emerge

Clearly the significance of raised blood pressure was not understood, and something had to be done about it. Part of the response was the establishment of a long-term followup study of the population of the town of Framingham, Massachusetts, to examine the consequences of mild, moderate and severe hypertension, as well as other cardiovascular risk factors including smoking and obesity.

This was the first of many welldesigned studies which all broadly came to the same conclusion – that all the grades of hypertension combined were the commonest causes of heart attacks and strokes.

By the time the Framingham study published its preliminary findings, antihypertensive drugs were becoming available, and in 1964 a British trial, followed by a US trial in 1967, showed that lowering blood pressure was worthwhile. For reasons which are not immediately clear, these and other treatment trials concentrated on the diastolic blood pressure, largely ignoring the systolic pressure.

#### Systolic pressure is all that matters

In 1971, when I was working in Chelmsford, I went to the Medical Library to catch up with the journals. I picked up *The American Journal of Cardiology* and was astonished. There was a paper from Framingham on the relative importance of systolic versus diastolic blood pressure. Systolic pressure was the clear winner; a finding which was later confirmed by a great many follow-up studies.

Despite this evidence, treatment trials still tended to be diastolically-based until well into the 1980s, much to the impatience of the population scientists (scientists who are interested in statistics involving whole populations). However, several trials looking at the outcomes of reducing systolic blood pressure - even when the diastolic pressure was not raised – did become available, culminating in the SPRINT study in 2015. The conclusion? The treatment of systolic hypertension, even in people without diastolic hypertension, prevents heart attacks and strokes.

In 2008 three distinguished clinical academics from Britain and Sweden published a review in *The Lancet* entitled *Systolic pressure is all that matters*. I wish that message would get through to the majority of doctors who do not receive *The Lancet*! Sadly there is a state of ignorance on this matter; otherwise there would have been no need to have written this article.

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.

#### What is the SPRINT study?

The Systolic Blood Pressure Intervention Trial (SPRINT) divided more than 9,000 people with high blood pressure into two groups. One group had their systolic blood pressure brought down to the standard target of 140mmHg. The other group had more intensive treatment, lowering their systolic blood pressure to 120 – and their rates of heart attack, heart failure and stroke were reduced by a quarter. It was so successful the trial was stopped three years early.

## JP TAKES ON THE LONDON MARATHON 2017

Our CEO's husband, JP, prepares to run 26.2 miles for Blood Pressure UK

John Paul Boyd, 37, is a Management Consultant in the telecoms industry. He lives in London with his wife Katharine and baby daughter, Sylvia. He explains why he's taking on this 'ridiculous, frankly ludicrously long run'.

#### **Q**You're already a runner, will this be a tough challenge for you?

**A** I ran the London Marathon in 2008, it's taken me nearly a full decade to forget the pain.

#### **Q**Will you be wearing fancy dress, for example, a rhino costume or a post box?

A Not currently planning to, although that may change nearer the time. Last time I ran it was particularly dispiriting to be overtaken by five marines in full combat gear carrying a canoe over their heads.

**How are you training for the run?** A I run 5K most weekends and I'm gradually getting more used to long runs. I'm aiming to run about five times a week with a combination of sprint training, middle distance and one long run.

### **Q**How do you prepare yourself for a training session?

A I always set a target – whether that's distance or time, and try to push myself a bit further than the last time.

**Q**And how do you wind down afterwards?

A I'd like to sit on the sofa and do

very little but our baby, Sylvia, usually has other ideas.

#### Who or what inspires you?

A My family being proud of me for getting through the ordeal.

How are you going to reach your fundraising target? A From recollection of last time it's really difficult to raise £2K. I'll start by going cap in hand to friends and I'll run cake sales at work, and I have a few more ideas up my sleeve. If any *Positive Pressure* readers are feeling generous, please sponsor me at http://uk.virginmoneygiving.com/ JohnPaulBoyd

Why have you chosen to support Blood Pressure UK? A Both of my parents had heart

#### attacks but survived, but one of my wife's friends recently died of a heart attack at a young

age, it's very sad to think that all that pain and anguish could have been prevented. I believe anything that helps to combat heart disease, raise awareness and save lives is very worthwhile.

#### **Q**Do you have any tips for someone looking to start long distance running?

A You can do it! When I last ran the marathon I started from a very poor baseline of health. There's a scene in the film Run Fat Boy Run where lead actor Simon Pegg starts running down the street and is out of breath after two minutes, that was me in mid-January 2008. I panicked, stopped drinking and started training three times a week, and I managed to get round the marathon.

#### Could you be a fundraiser for Blood Pressure UK?

If sporting challenges aren't your cup of tea, there's lots of other ways you can help – like drinking tea for example. Perhaps you could invite people over for a coffee morning and cake sale, team up with friends to put on a book sale, or if you have green fingers, start sowing seeds for a garden open day and plant sale this summer.

Our A-Z of fundraising ideas will have ideas to suit you at www. bloodpressureuk.org or simply get in touch. We can provide posters, collecting tins and other resources to support you.

Reach us at: Email: info@bloodpressureuk.org Telephone: 020 7882 6255 Letter: Fundraising Team, Blood Pressure UK, Wolfson Institute, Charterhouse Square, EC1M 6BQ

## THREE FRIENDS TAKE ON THREE CITIES



With two great friends for company, Julie Slack cycled for four days from London to Amsterdam, raising £1,700 for Blood Pressure UK

Julie's story is an inspiring one. Her blood pressure rose during pregnancy due to a condition called pre-eclampsia, which tragically caused her to lose her first child. The loss of her father–in-law a few years later was too much, and it took months of medications and a stay in hospital to get her blood pressure back under control.

As soon as she was well enough, the mother of two from High Peak decided to take on the 3 Cities Challenge.

#### What is the 3 Cities Challenge?

A It's a four day bike ride from London to Amsterdam, via Brussels in Belgium.

#### **Q**Was it a tough challenge?

A We had our highs and lows of course, but I cycled with two friends so we picked each other up, we helped each other out.

London to Dover was tough. You might think the South of England is flat – it's not. We had to cross the North Downs by bicycle. The weather was perfect though, it was about 18 degrees, sunny, perfect.

#### **Q**Did you have to persuade your friends to cycle with you?

A I cycled across Kenya five years ago which was a huge challenge. But after that I became ill and I wasn't able to exercise for a long time, so when the doctor gave me the all clear to get back out on my bike I decided to take on the challenge. I just mentioned it to a friend and she said 'oh, can I come?'. I was delighted, and then another friend asked if she could come too!

## QHow did your friends get along?

A Because I'd done a cycling challenge before, I knew I could do it, but they hadn't. They had to deal with all the psychological ups and downs, all the moments of

doubt and asking 'what have I done? Why am I doing this?' Even I had butterflies on the first morning. I knew they could do it. They'd done so

much training, they didn't know they were ready, but I did.

#### **Q**What was your highlight of the trip?

A On the morning cycling out of Bruges, the support team woke us up at about seven in the morning and sent us sun was just coming up and the way the light hit the water was so beautiful. It was picturesque.

out cycling along the canal paths. The

#### Did you reach your fundraising target?

We'd like to say

a huge thank you to

Julie for going to such

extraordinary lengths to raise

funds for us. Not only is she

keeping herself healthy, she's

inspiring others and raising

awareness of high

blood pressure in

the process.

A My target was £1,600 and I just topped £1,700. I did a lot of fundraising events throughout the year – an art show, a fashion show and a dinner. I don't like to keep asking for money so I made and sold tote bags out of fabric with bicycles on – it means people have something to keep. After the event

people would come up to me and give me a donation and say 'well done'.

#### Would you do it again?

he's recommend it to anyone. We were with a group of about 80 people doing the challenge. Everyone has their story, their

own reason for being there. Cycling into Amsterdam on that last morning, all wearing the same T-shirts, the reaction was amazing, so many people came out to cheer us on.

## A GENTLER WAY TO BE ACTIVE

## How the gentle breathing and postures of yoga could improve your health and wellbeing

T is well known that regular exercise can lower your blood pressure, and any activity that leaves you feeling warm and a little out of breath is ideal. But if working up a sweat running or cycling isn't for you, there could be another way.

#### What is yoga?

Yoga is an ancient practice that began in India 5,000 years ago. Through breathing techniques, meditation, and moving through a series of postures, yoga is designed to improve strength and flexibility, and physical and mental well-being.

#### Why is yoga good for body and mind?

Yoga appears to be a safe way to be active, building strength, flexibility, balance and coordination which could help prevent falls in later life. There is some evidence showing it helps with stress, depression and anxiety too.

#### Can yoga help with blood pressure?

Although limited, there is some evidence that yoga could help with blood pressure and heart disease. One review in 2014 collected together all the studies looking at yoga and the risk factors of cardiovascular disease and found that yoga lowered systolic and diastolic blood pressure, blood cholesterol and body weight.

This September, a similar review, this time looking at people with the metabolic syndrome (a collection of health problems that can lead to heart disease including raised blood pressure and raised blood cholesterol), found yoga could lower systolic blood pressure.

#### How to get started

Yoga classes are available in leisure centres, health clubs, hospitals and surgeries all over the country, and there are classes for all ages and fitness levels. Start with a class to learn the poses and breathing techniques properly and safely, and once you're more confident, there are numerous books and DVDs available to use at home as well. As with all exercise classes, a lot depends of the teacher, so try a few classes to find a teacher you connect with and a level that's suitable for you.

NHS choices, A guide to yoga, has more information to get you started, including yoga styles for beginners, how to find classes and videos you can do at home. Visit www.nhs.uk/Livewell/fitness/ Pages/yoga.aspx

# A GENTLER WAY TO BE ACTIVE

#### Three simple yoga poses for beginners

#### From London-based yoga teacher Nell Clough. Follow Nell on Instagram @nellcloughyoga



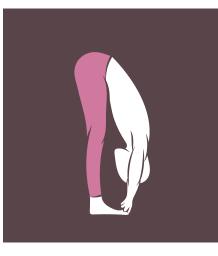
#### Legs up the wall

Lie down with your bottom against the wall and, if your prefer, a cushion under your pelvis. This simple pose lifts the heart higher than the head and the idea is to help with circulation in the legs. To exit the pose, bend the knees to chest and roll onto one side.



#### Baddakonsana (bound angle pose)

Keep your soles of your feet together with your knees relaxed out to the side. You can use cushions to support the knees at a comfortable level. This is a calming pose which you can do lying either sitting up, or lying on your back.



#### Standing forward fold

With your feet a hip-width apart, bend your knees and place your palms on your thighs. Bending from your hips, bend your upper body forwards over your legs and relax your head and neck. Reach your hands towards the floor and, if it feels comfortable, begin to gently straighten your legs. You can do this pose standing or using a chair.





## Why blood pressure knowledge is power

The results of our survey are in, and 87% of Blood Pressure UK members found it helpful, reassuring or empowering to measure their blood pressure at home

The stress of having your blood pressure measured in clinic can make your blood pressure go up, so your reading is higher than it should be – this is known as the 'white coat' effect. Coupled with the fact you can only check your blood pressure in clinic every so often, keeping an eye on your numbers at home can give you and your doctor a better idea of what's really going on, and how well your treatments or lifestyle changes are working.

Buying and using a good home blood pressure monitor can seem confusing, so, in our Summer *Positive Pressure* we asked if you use one and how you're getting on.

Half (52%) chose a machine based on information in adverts, shops and pharmacies, while the other half of responders took advice from a health professional or friend, called us, or did their own research. And three quarters (75%) thought that their machine's readings were reliable.

There's a wide range of machines available. Digital or automatic monitors are the easiest to use. Choose one with an upper arm cuff – they tend to be more reliable than wrist or finger monitors. Check it's on the British Hypertension Society's list of validated machines at www.bhsoc.org – they've been tested to make sure they give results that you and your doctor can trust.

One third (32%) record their blood pressure monthly, and one third (30%) take readings in both the

morning and evening. How often people checked their numbers, and the times of day, varied across the board.

How often you should take readings will depend on your blood pressure – your doctor or nurse will be able to advise you. It can be useful to record your blood pressure every day for the first week to build up a picture of what it's normally like, then less often but regularly. For example, once a week. It's also helpful to record your numbers for four to seven days before a clinic visit so you can show your doctor. Take three readings in the morning, one to two minutes apart, and the same again in the evening.

#### Nine out of 10 (87%) said home monitoring is helpful, reassuring or empowering, while 13% found it caused anxiety.

Many people find home monitoring helps them feel in control, but some feel anxious when they first start and take readings too often. Before you decide to buy a machine, ask yourself – will it make me feel more relaxed or more worried? Or call us on 020 7882 6218 or have a chat with your doctor or nurse.

## Two thirds (69%) thought that all patients should measure blood pressure at home whilst 25% weren't sure, and only 6% said no.

If you're not sure whether home monitoring is for you, we have lots of information on the pros and cons, how to choose a good blood pressure monitor and how to get the most from it, on our website.

CONGRATULATIONS to Margaret Harden from Hornchurch, Essex who won the prize draw to receive a free blood pressure monitor for taking part in our survey. And a huge thank you to everyone who took part. Wiltshire Farm Foods Diced Beef Chilli





## Nutritious and Delicious: a balanced diet to help you control your blood pressure

Blood pressure can fluctuate greatly due to diet hence why it is important to make the right dietary choices if you suffer from high blood pressure, as these can delay, reduce or avoid the need for medication.

Changes can include reducing your fat and salt intake and adding more whole grains, fruit and vegetables into your diet. To make this easier **Wiltshire Farm Foods** the UK's leading home delivered meals supplier have developed a new range of 'Nutritious and Delicious' meals that all benefit from:

- A maximum of 400 calories
- Low in fat and saturated fat
- Low salt
- Source of protein or high in protein
- At least one of your five a day

This range allows those with high blood pressure (or simply anyone seeking to make a change to their diet) to enjoy nutritious, easy to prepare meals that taste fantastic. The range features 22 complete meals as well as 6 low fat, low salt, reduced or low sugar desserts, each under 200 calories to enjoy.

With dishes ranging from exotic Moroccan Chicken to tasty Vegetarian Cottage Pie or sumptuous Roast Pork with Cider & Apple gravy, there really is something to suit every taste. Meals start from just £2.95 and are delivered free direct to the freezer by friendly local delivery drivers.

Thanks to the Nutritious and Delicious range healthy eating has never tasted so good.



Paprika Pork

Chicken with Tomato & Basil Sauce



Chicken and Spring Vegetable Casserole

To order a brochure or to find out more information call Wiltshire Farm Foods today on

0800 066 3366 (lines open 24 hours a day, 7 days a week) or visit our website wiltshirefarmfoods.com.

## Information & publications

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 and manage it.



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.

#### Healthy lifestyle and blood pressure

This booklet shows how getting more active and keeping to a healthy weight can help lower your blood pressure. It looks at how you can start to build more activity into your day, and what types of activity may be best for you. It also talks about sensible approaches to losing weight if you need to.



#### Measuring your blood pressure at home

This booklet can help you decide whether measuring your blood pressure at home is right for you, and how to choose the right type of monitor. It also gives you tips about how and when to measure your blood pressure to be sure you are getting reliable readings.



#### Getting the most from blood pressure medicines

Most people with high blood pressure will need to take medicines to control it. This booklet talks about the different medicines for high blood pressure and about how you can get the best results from them. It also looks at side effects of blood pressure medicines and what you can do to avoid these.







#### Healthy eating and blood pressure

This booklet looks at how what you eat can affect your blood pressure. It shows you how you can start to eat less salt, and how to get your five daily portions of fruit and vegetables. It also explains how alcohol, fats and sugar can all affect your heart and body.

#### Love your heart: a South Asian guide to controlling your blood pressure

High blood pressure is a major cause of heart disease and stroke. People of South Asian descent are much more likely to develop these health problems than other people. This booklet looks at how to lower your risk by keeping your blood pressure controlled.

#### Healthy eating: the African Caribbean way

People of African Caribbean origin are more likely to develop high blood pressure. This booklet looks at how you can help lower your blood pressure by eating healthily. Traditional African Caribbean cooking can be high in salt and fat, so this booklet looks at how to prepare healthier alternatives.

Our medicines information sheets provide information for patients about the different blood pressure medications that are used to treat high blood pressure. They are all available to download from our website and titles include:

- ACE inhibitors.
- Angiotensin receptor blockers (ARBs).
- Calcium channel blockers.
- Diuretics.
- Beta-blockers.
- Non-standard medicines for high blood pressure.

All these publications are free to Blood Pressure UK members. Call **020 7882 6255/5793** for your copy or visit **www.bloodpressureuk.org** 



UK Helping you to lower your blood pressure