

the magazine of Blood Pressure UK

ISSUE 51 > SUMMER 2022

POSITIVE

pressure

HOW ACCURATE ARE YOUR READINGS?

Professor Gareth Beevers looks for sources of error in blood pressure readings

IT WAS EASIER THAN I THOUGHT!

How clearer motivation and boundaries made lowering blood pressure easier for one reader

HOW TO BE A SAVVY VEGAN

We review Azmina Govindji's fabulous book for going plant-based



Blood Pressure UK

Helping you to lower your blood pressure

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POSITIVE
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.

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Welcome

From Phil Pyatt, Chief Executive Officer

This is my second issue of *Positive Pressure* since taking over as Chief Executive Officer and I can't believe that in August I will have been in the role for a year already. Time certainly does fly!

As we get used to the world post Covid-19 and the challenges of learning to live with it, we're now starting to see the effects on the nation's health, particularly in high blood pressure. Whilst no official figures have been released, it is clear that with people visiting health services a lot less over the last two years, the number of people having blood pressure checks has decreased.

That's why Know Your Numbers! Week in September is more important than ever. We'll be encouraging people across the UK to check their blood pressure at home so we can reach more of the one in three who don't know they have raised numbers.

If you're planning to check your blood pressure at home this September (or indeed at any time!), you might be interested to learn about what can cause an inaccurate reading from Professor Gareth Beevers on page 14, and tips on how to choose a monitor on page 9.

I want to again thank our members and the wider hypertension community for all the work that you do in raising awareness as we certainly cannot do this alone, and to those that have signed up to our Patient Panel to help shape our work.

Finally, I want to thank those who have been so generous in raising much-needed funds so that we can support more of those who need it, from a range of communities and backgrounds.

I hope you enjoy this summer issue and seeing all the great work that's taking place on hypertension. Together we will beat high blood pressure.

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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?

Visit

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Blood Pressure News



Come on Colin!

Colin and Kate with their medals from two half Marathons this year

Our Marathon runner gets ready for the big day

Colin Mair from Swindon is clocking up the miles in preparation for the TCS London Marathon this October, when he'll be donning his Blood Pressure UK T-shirt as our official charity runner for 2022.

Running alongside him will be his partner Kate, who won a 'good for age' place with her speedy completion time at last year's event and will also donate the funds she raises to Blood Pressure UK.

The pair are well known in their communities as keen long-distance runners who regularly take part in half marathons, marathons and 30 mile plus walks. They have both just turned 60 and are as active now as they were in their 30s.

Colin was inspired to choose Blood Pressure UK because he was diagnosed with high blood pressure in his thirties by chance as part of a health check, and knows without it he might have gone many years without realising he had a problem. Since then he's kept his numbers under control with medication, diet and an energetic lifestyle and believes good health is the key to a happy life. Now, he wants blood pressure numbers to become something we all know like we know our height and weight.

 *We were blown away by Colin's application and can't wait to cheer Colin and Kate on in October.*

Cuff size matters

One size does not fit all when it comes to measuring your blood pressure

A new study has shown the importance of choosing the right-sized cuff for your blood pressure monitor. A cuff that is too small will make your blood pressure reading too high, and a cuff that is too large will make it too low. New research from the United States has put figures to the facts, examining blood pressure readings in 165 individuals using modern blood pressure machines, as opposed to the old mercury machines from which this knowledge was derived.



The results showed the wrong cuff size can skew your readings by up to almost 5mmHg. That could be the difference between a GP prescribing blood pressure medicines that are not necessary, or not prescribing them when they are. Choose your cuff size based on a

measurement of your upper-arm circumference, half way between your shoulder and your elbow.

 *This is a very important issue. You can read more about sources of error in blood pressure readings on page 14, and our tips for choosing the right monitor on page 9.*

Out & about

A FEW THINGS WE'VE BEEN UP TO LATELY



FINDING SOLUTIONS

Our former CEO Katharine gave a fantastic talk on our behalf to 140 team members at Bouygues Energies & Services Solutions (UK) this Spring. As part of Healthy Heart month, this workplace webinar covered blood pressure myth busters, how to Know Your Numbers!, and advice for managers on what to be aware of at work.



GETTING SUPERWELL

We are also guest speaking for a company called SuperWellness Ltd this summer as they gear up to support Know Your Numbers! Week in September. We'll attend their monthly meet up, where peers from different industries get together to exchange ideas and knowledge on a range of health-related topics, supporting wellbeing for themselves and their colleagues.

Blood Pressure News

Stephanie and Nathalie at their first ever triathlon

Family rallies to raise awareness of high blood pressure

The family and friends of Jeff Heyes are getting active in their communities in his memory

Jeff Heyes was an extraordinarily active man who loved to compete in triathlons – his medal collection is a sight to see. He was looking forward to developing his sports coaching and doing the sports he loved when he passed away in his sleep aged just 58 this February due to undiagnosed heart disease, just weeks after he retired. He raised thousands of pounds for charity over the years and his friends and family thought it only fitting to raise funds to beat high blood pressure and heart disease in his memory.

Donations from his funeral went to Blood Pressure UK and Heartbeat of Sport, but his wife Margaret and his family wanted to do more.

Jeff and Margaret's grandchildren Lilly, Ella, Jacob and Sienna competed in Lakesman Unlocked 2022 cycling and running challenge, and his daughters Stephanie, Natalie, and son-in-law Steven are competing in the Ullswater Triathlon on his birthday this July. His triathlon team and local gym Lake District Bar Bell raised over £1,300

Jeff taking part in the activities he loved

in a Goggins event, running four miles every four hours for 48 hours.

It doesn't stop there. His club, Tri Lakeland, and GLL at Workington Leisure Centre organised a mini sprint triathlon in April. The event was a great success and raised over £600, with Stephanie and Natalie crossing the finish line together, their first ever tri event.

His friends, along with GLL at Workington Leisure Centre and local gym ETL (Eat Train Live), also ran a multi exercise day in May where the family joined in the spinathon and family fun

run, with many friends and colleagues. Margaret even organized for local pharmacists to advertise free blood pressure checks at the events, and all funds went to Blood Pressure UK and a local wellness programme.

Now, Margaret is working with GLL at the local leisure centre, charities and the triathlon club to raise awareness and wants to see regular monitoring programmes in place. And ETL are introducing blood pressure monitoring and health MOT style checks for their members.

Since meeting with Jeff's GP, the practice has begun contacting people for a medicines review relating to high blood pressure, high cholesterol and heart disease, and a full health check. Margaret is hopeful the momentum will continue with a referral programme to the Leisure Centre and their wellness programme. She is even working with Jeff's former work place to set up a programme of health checks for their 10,000 staff.

We are very grateful to Margaret and her family for channelling their energy into raising awareness of blood pressure monitoring – even among those who are very fit and active.



Lakesman Unlocked 2022 challenge



The protective power of avocados

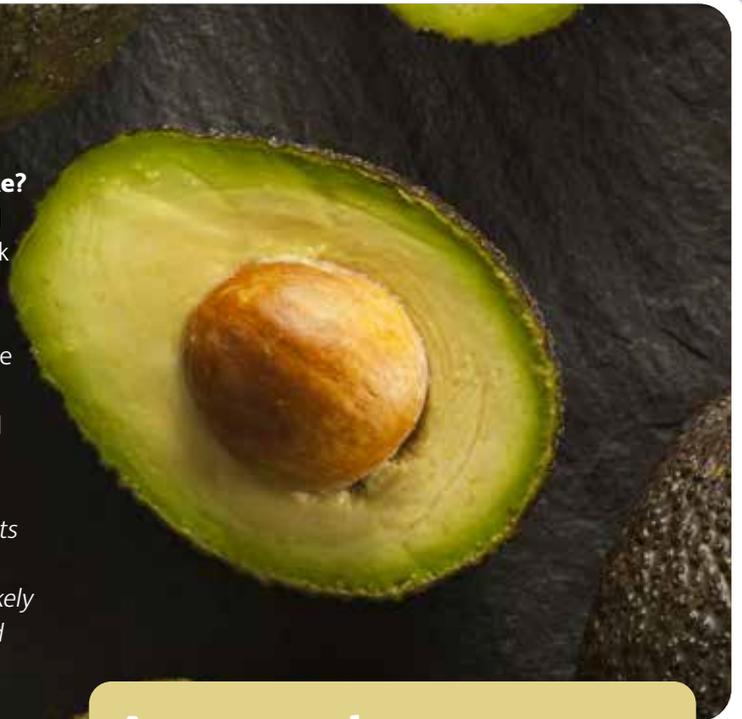
Could avocados lower risk of heart disease and stroke?

A 30-year study of 110,000 health professionals has found that those who ate at least two servings of avocado a week had 16% lower risk of heart disease and stroke than those who rarely ate them.

Replacing high-fat animal products such as butter, cheese and bacon with avocado was also linked to a lower risk. Avocados contain unsaturated fats (healthy fats), fibre and other components that have been linked to better heart health.



This study can't prove cause and effect and the results could be caused by differences in the participants' lifestyles, but avocados do contain healthy fats and are unlikely to cause any harm. Swapping saturated fats for unsaturated fats is a good move for heart health.



Salt reduction in South Africa has promising results

Early evidence suggests mandatory salt reduction targets are working

In 2016, South Africa was one of the first countries to make salt reduction mandatory for food manufacturers and early data suggests the programme is working.

Data from a small sample of the population showed that salt intakes fell by 1.2g per day in 4.5 years – enough to prevent thousands of strokes and heart attacks due to the reduction in blood pressure, as salt raises blood pressure.

Importantly, black people and lower status socio-economic groups had the greatest reductions of 2.04g and 1.84g per day, suggesting the programme could help in reducing health inequalities.

The average salt intake in Sub-Saharan Africa is 8g per day, similar to the UK, and far

higher than the World Health Organisation recommendation of less than 5g per day. The programme was expected to reduce salt intakes by 0.85g per day which would prevent around 7,400 deaths per year, and the early data shows even greater promise. Larger and longer-term studies will be needed to see the effects in the long run.



It has taken the UK 20 years to see similar salt reductions with a voluntary approach that South Africa has achieved in just a few short years with a regulatory approach. It's time for the UK to follow suit.



A game changer for blood pressure control

Studies are investigating a six-monthly injection instead of daily tablets

Trials are looking into a new treatment for high blood pressure that can reduce the need for daily medicines. Zilebesiran is given every six months by injection under the skin. It acts on the liver to block production of a protein called angiotensinogen, which plays an important role in driving up blood pressure.

The UK research is being led by cardiologist and friend of Blood Pressure UK, Dr Manish Saxena, at Queen Mary and Barts Health NHS trust.

Dr Saxena explains: *"If these studies are successful, we will have a game changer medication on our hands. High blood pressure is the leading cause of heart attacks and strokes but many people don't take their medication because of side effects or because it feels like a burden in everyday life. If you have a medication that is long-acting and doesn't cause many side effects it can really help improve an individual's blood pressure control."*



The studies are due to complete in about 2.5 years and we look forward to the results. In the meantime, keep taking your tablets every day and feel free to call our helpline if you are having any problems.

Paracetamol use should be kept short term

The world's most-used drug may not be suitable for long term use

Data from two new studies has raised concerns over the long-term use of paracetamol.

A small study from the University of Edinburgh showed that paracetamol raised blood pressure further in people already with raised numbers. 1g taken four times a day (a dose routinely prescribed for chronic pain) for two weeks caused a rise in systolic blood pressure of almost 5mmHg. That's enough to raise the risk of heart disease or stroke by an estimated 20% if sustained in the long term.

Meanwhile, a large study showed that regularly taking soluble or effervescent (fizzy) tablets slightly raised the risk of heart attacks and strokes over a year compared to regular tablets, whether or not the

patients had high blood pressure. Soluble and effervescent tablets are made using sodium (part of salt) to help them dissolve.

These studies have some limitations, but suggest it's worth weighing up the pros and cons of paracetamol for chronic pain, going for the lowest dose for the shortest time possible, and monitoring your blood pressure.

Blood Pressure UK SAYS *It may be wise to review long-term paracetamol use and avoid soluble or effervescent tablets where possible, but short-term use should not be a problem.*



OPTIMISING BLOOD PRESSURE MEDICINES SAVES LIVES

East London study shows filling gaps in care prevents heart attacks and strokes

A study of over a million people in East London has shown that optimising medicines for high blood pressure and cholesterol would prevent 1,000 heart attacks, strokes and deaths over five years, and save £50 million in hospital costs over the patients' lifetimes.

In 123 primary care practices, 27% of people with high blood pressure were not receiving optimal treatment. Of those, 17% were not taking any medicines. The remainder were, but their blood pressure was not at target and they were not receiving the optimal combination of up to three medicines recommended by NICE.

Practices in East London are now looking to put a programme in place to optimise medicines to prevent disease and reduce health inequalities.

Blood Pressure UK SAYS *This study highlights the importance of blood pressure screening and control, both in saving lives and hospital costs, and the difference putting the NICE guidance into practice could make.*

More than a pick-me-up

Why your morning coffee could do more than help you stay awake

A study of almost half a million people has shown that up to three cups of ground coffee per day could give you more than a caffeine high. It could improve your heart health.

Researchers from London and Budapest analysed data from 468,829 people in the UK Biobank project and found that those who drank a moderate amount of coffee (half a cup to three cups) had a 12% lower risk of dying and a 21% lower risk of stroke during the 11-year study compared to non-coffee drinkers. MRI scans on 30,000 participants showed the benefits could be due to subtle changes in the structure and function of the heart, slowing down age-related changes.

Even heavy coffee-drinking did not cause harm, but did not cause benefit either. Decaffeinated coffee also appeared protective, but instant coffee had no effect.

Blood Pressure UK SAYS *Previous research has shown mixed effects of coffee drinking. This is the largest study to date so it's a relief to see that coffee appears safe and could be helpful rather than harmful.*



Join our new PRESSURE PANEL

There are still a few spaces available on our new patient panel

Our patient panel is up and running and helping to guide the work we're doing to influence blood pressure care in the UK. There are still a few spots available and we'd love for you to join. We particularly welcome people from Black and South Asian communities who are currently underrepresented on the panel.

Taking part will give you the chance to share your experience of living with high blood pressure and have your views heard. We will ask you to share feedback every now and then by questionnaire on topics such as your experience of treatment, the language used in health information, and your views on health care policies and our campaign ideas.



NEWS

If you would like to join our Pressure Panel, email us at info@bloodpressureuk.org

A lower blood pressure target could support brain health

Intensive blood pressure treatment should not pose a risk to brain health

Blood pressure medicines are key to lowering the risk of diseases of the brain such as stroke, small vessel disease and dementia, but there are worries that lowering it too far could reduce blood flow and in turn cause problems such as cognitive decline.

Now, results of the SPRINT MIND trial (a sub-study of the SPRINT trial) have shown that lowering blood pressure to a target of 120mmHg rather than 140mmHg improved blood flow rather than hindered it.

315 adults were split into two groups with the higher and lower

treatment target. The intensive treatment group not only had greater reductions in their blood pressure, they also had improved blood flow to the brain, as shown on MRI scans. Encouragingly, the effects were stronger in people with a history of diseases of the heart and blood vessels.



WHAT IS THE SPRINT TRIAL?

2016's Systolic Blood Pressure Intervention Trial (known as the SPRINT trial) was a landmark trial that showed intensive treatment to lower systolic blood pressure (the top number) down to below 120mmHg rather than the standard 140mmHg reduced

the risk of stroke. It also showed other benefits for brain health, including fewer cases of cognitive impairment. The effect was so clear that the trial was stopped early, and the results have influenced blood pressure management and treatment guidelines.



It is encouraging that the researchers did not find evidence of a risk to brain health with lower blood pressure, and rather found benefit.

Get yourself a home monitor for Know Your Numbers! Week

This year's Know Your Numbers! Week will take place from 5-11 September – it's our annual campaign to get the nation checking their blood pressure.

Many people in the UK don't know their blood pressure numbers, or why it's a problem if they rise. We're on a mission to change that, and we want everyone to start checking their blood pressure at home.

Home monitoring is a simple way to check if your blood pressure is in the healthy range. It means you can keep an eye on how well any medicines or lifestyle changes are working, and shows you if it's time to contact your doctor. The aim is to prevent heart attacks and strokes by taking action if your blood pressure is high – you need to know it to lower it.

While doctor's appointments are hard to come by and NHS teams are recovering from the pandemic, home monitoring means you can take control of your health and feel confident without an extra trip to your GP.

We're campaigning to make home monitors available on prescription to those most in need and least able to afford them. But if you can, we recommend buying one to use at home to give you piece of mind that you Know Your Numbers!

Is home monitoring right for you?

Home monitoring is a great way to keep an eye on your blood pressure, but it's not for everyone. Occasionally, people find it makes them feel anxious – which can temporarily raise blood pressure – and end up checking their blood pressure too often.

Let us know how you get on with home monitoring. Does measuring your blood pressure make you feel more confident and in control, or something else? This will help us find out if there's any problems that need addressing.

If you have any doubts or questions about measuring your blood pressure, you can contact our Hypertension Nurse Specialist on 020 7882 6218 or help@bloodpressureuk.org

Get involved

If you do one thing for Know Your Numbers! Week, get yourself a blood pressure monitor – use our guide on the next page to help you choose one. If you want to go a step further:

- ♥ Host a 'Home Pressure Station' and measure your friends' and family's blood pressure.
- ♥ Encourage friends and family to buy or borrow a blood pressure monitor.
- ♥ Share our home monitoring resources online.
- ♥ Speak to community groups about home monitoring, such as your local Rotary, library or patient groups.
- ♥ Tell us your blood pressure story (anonymously if you wish) so we can inspire others to know their numbers.
- ♥ Tell people about our website and helpline.



How to choose a home blood pressure monitor



Stick to your budget

You don't need to go for an expensive monitor, it just needs to be clinically validated and easy to use. There are sometimes extra features which can be helpful but are not necessary, such as a built-in memory that stores all your readings, but you can simply use a pen and paper instead.

You can buy monitors for about £20 online from retailers such as Amazon or John Lewis, from pharmacies either in store or online, or direct from the manufacturer.

Measuring your blood pressure at home is very simple thanks to modern blood pressure machines. We recommend that all adults in the UK buy or borrow a monitor, so you can keep an eye on your numbers easily. There are a few simple things you need to know before you choose a machine so that you and your health professional know you can rely on the results. Follow these simple tips to choose one that's right for you.

Check that it's clinically validated

This simply means it has been tested to make sure it gives accurate results. If you're not sure, the British and Irish Hypertension Society have a list of validated monitors on their website at <https://bihsoc.org>

Choose a machine with an arm cuff

Monitors come with cuffs that go around either your upper arm, wrist or finger. Choose one with an arm cuff as these tend to be more reliable, and most research around blood pressure and its treatment has been done using an arm cuff.

Make sure it's fully automatic (digital)

These are the easiest to use and most reliable.

Make sure the arm cuff is the right size

Make sure the cuff that wraps around your arm is the right size, otherwise your reading will be too high or too low. You might be able to choose a cuff size when you buy your machine. If not, most home monitors come with a medium-sized cuff and you will need to order a different size separately.

To find out what size you need, measure around your arm at the midpoint between your shoulder and elbow. If your arm circumference is less than 33cm, a standard adult cuff should fit. If it's no more than 42cm a large cuff should fit. Very few monitors have cuffs larger than this, but if this isn't long enough, it might be possible to measure your blood pressure by wrapping the cuff around your forearm.

The instructions that come with your monitor will also explain the cuff size.

Keep it calibrated

After you've bought your machine, you will need to send it back to the manufacturer to get it re-calibrated at least once every two years – the instructions will say how often – but monitors up to four years old should still be OK. The manufacturers will test and adjust the monitor to make sure it's giving you accurate results. There will probably be a fee for this service. Alternatively, you might prefer to buy a new one.

Check with a health professional that you know how to use it

All blood pressure monitors come with simple instructions on how to use them, but if you're still not sure, you could ask your pharmacist or practice nurse to show you how to use it. We also have a video on home monitoring on our website, www.bloodpressureuk.org/your-blood-pressure

That's it! You're ready to go.

Blood pressure numbers explained

A quick guide to healthy blood pressure numbers

BLOOD PRESSURE NUMBERS EXPLAINED ♥

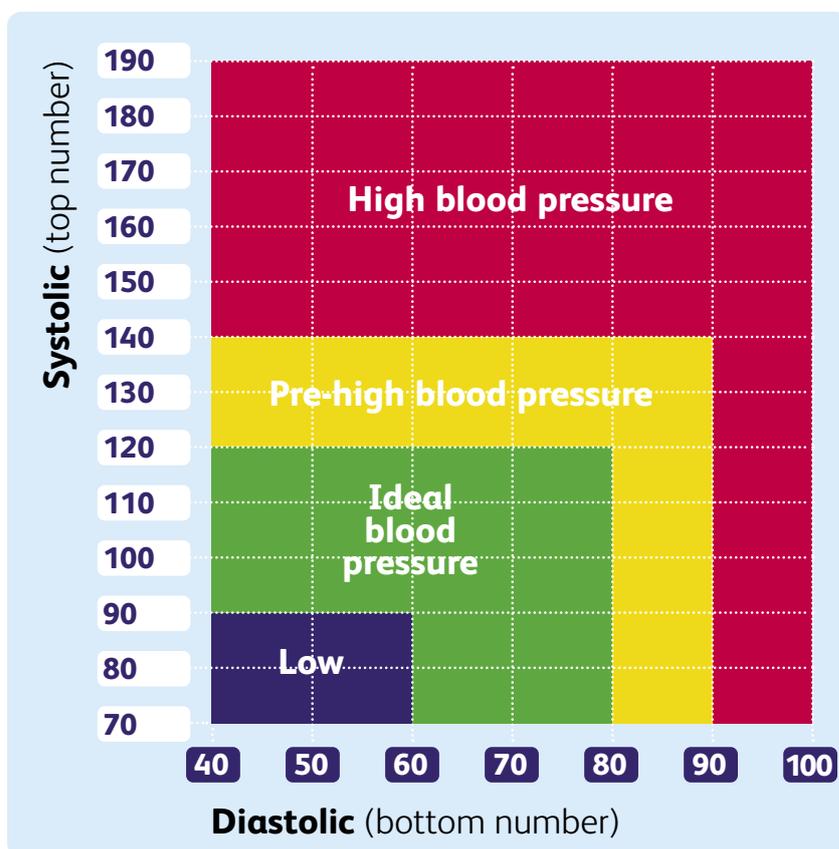
You can get your numbers checked at your GP surgery or pharmacy or with a home monitor if you have one. Once you know your numbers, use our blood pressure chart to see what they mean and if your blood pressure is in the healthy range.

The chart is suitable for adults of any age, as the cut-off point for diagnosing high blood pressure doesn't change with age.

How to use the blood pressure chart

Simply find your top number (systolic) on the left side of the chart and your bottom number (diastolic) on the bottom. Where the two lines meet is your blood pressure.

Any questions? Call our Hypertension Nurse Specialist who will be happy to help on 020 7882 6218 or help@bloodpressureuk.org



As a general guide:

140/90mmHg or over
You may have high blood pressure

Most doctors use 140/90mmHg as the cut off for point for diagnosing high blood pressure (hypertension). This is the point where your risk of serious health problems goes up. They might prescribe medications and advise you to make changes to your lifestyle to bring your blood pressure down.

A one-off high reading doesn't necessarily mean you have high blood pressure. GPs like to take several readings over a number of weeks to make a diagnosis.

What do these readings mean?

120/80mmHg up to 140/90mmHg
Pre-high blood pressure

Also called high-normal blood pressure. This is not high blood pressure, but it is a little higher than it should be and means you could go on to develop high blood pressure. Try to make healthy lifestyle changes to lower it.

90/60mmHg up to 120/80mmHg
Ideal blood pressure

Also called normal blood pressure. Your blood pressure reading is healthy. At this level you have a much lower risk of heart disease and stroke. A healthy lifestyle will help you to keep it in the healthy range.

90/60mmHg or lower
You may have low blood pressure

Low blood pressure usually isn't a problem, but it can sometimes make you feel faint or dizzy or could be a sign of another health problem. Your GP can talk to you about this.

Stay on top of your blood pressure medicines with LloydsDirect

We've partnered with LloydsDirect to help you manage your medicines the hassle-free way. Read on to see how switching to online prescriptions can save you time and effort, so you can focus on leading a healthy lifestyle.

Repeat prescriptions made simple

As taking your medicines is a key part of keeping your blood pressure under control, prescriptions can be a source of stress. LloydsDirect can make your life easier by helping you with all things NHS repeat prescriptions. Part of the LloydsPharmacy family, LloydsDirect is an online prescription service which you can use on your laptop, tablet or smartphone. From easy online ordering to free delivery and handy reminders, LloydsDirect simplifies every step of managing your medicines. Best of all, the service is free and doesn't cost the NHS anything extra either. You only need to pay for your prescriptions as normal.

Fuss-free ordering and free delivery

The way it works is very simple. First, you need to sign up for free on the LloydsDirect website or download the app. To use the service, you'll need to be registered with a GP surgery in England. Once you've signed up, you'll

be able to place a prescription order. You can order medicine for yourself or your loved ones, such as children or dependents. Your GP has to approve every order, so you don't have to worry about making a mistake. You can then choose between free delivery by Royal Mail or collection at your local LloydsPharmacy. The delivery option is even suitable for temperature-sensitive medicines, such as insulin.

Reminders to take and order your medicines

LloydsDirect can help you skip the stress of keeping up with your prescriptions. You can set reminders to take multiple medicines and turn them on and off according to your needs. You also get reminders to order your next prescription 10 days before you're due to run out. This ensures your medicines arrive with time to spare.

If you need to take blood pressure medication for a long time, dose and order reminders are great tools for sticking to your schedule. As Declan Lismore, Superintendent Pharmacist at LloydsDirect said: "Poor adherence to blood pressure medication leads to complications which can have a massive effect on people's quality of life. At LloydsDirect, we want to make taking medicines easier to improve health outcomes for our patients." In fact, helping people take their medicines as prescribed is one of the very reasons the service was created. A 2018 survey even showed that using LloydsDirect can have a positive impact on medicine adherence (taking medicines as prescribed).

A service you can trust

Over half a million people already trust LloydsDirect with their NHS prescriptions. Many of them are on blood pressure medication, which is one of LloydsDirect's most dispensed medicine types. As for what people think about LloydsDirect, the service has an 'Excellent' rating on Trustpilot, with an average score of 4.6 stars.



To sign up, head over to www.lloydsdirect.co.uk or download the app from the App Store or Google Play.

 **LloydsDirect**
by LloydsPharmacy

*www.lloydsdirect.co.uk/medicines-adherence

It was so much easier than I thought

Joe Hipgrave from North West London was diagnosed with high blood pressure last autumn after tests showed signs of kidney damage. But with the motivation of staying healthy and some clear boundaries to stick to, he found losing weight and lowering his blood pressure much easier than expected.

How did you discover you had high blood pressure?

My blood pressure had always been a little bit on the high side, but there was never any real urgency to do anything about it. But last September a urine test showed traces of protein in my urine. One of the likely reasons was high blood pressure putting too much pressure on my kidneys, and 24-hour monitoring showed this to be the case. At times it went above 170/90mmHg. The whole tone changed to 'we need to get this sorted now'.

What have you been doing to lower it?

I was aware that I was overweight, so it's been a combination of blood pressure medicines, and diet and exercise to lose weight. My GP prescribed 5mg of amlodipine daily which I'm still taking now. She also recommended using myfitnesspal.com which is an online service you can use to count calories. You set a calorie target then enter what you've eaten throughout the day, and any exercise, and it adds up your calories. I quite looked forward to getting to my computer and putting in what I've eaten then looking at my little line and seeing I'm under it.



Joe, out for a long weekend walk

What have you found that works for you?

I started losing weight very quickly which was a great encouragement. The online calorie counter helped. Being strict about not snacking between meals, cutting out dairy and

confectionary and just eating slightly smaller meals was enough to lose weight fairly quickly. Because the weight loss made me feel much better, I was able to keep up the dieting.

My GP recommended buying an inexpensive blood pressure monitor to use at home. Testing regularly and

recording the figures was a good way to keep focused. It was very encouraging seeing my weight and blood pressure numbers coming down.

Have you found having clear boundaries around diet helps?

I have blanket rules about what I can eat during the week and it's helpful to have these lines to stick to. But at the weekend it's OK to have something a bit different. If we're going to a restaurant or to someone's house for dinner I say it's OK to have an evening off. Life is short, you have to enjoy yourself.

I read recently that it takes two weeks to change a habit, and now I don't even think about snacking in between meals. I never look at my plate and wish I could eat more, I just think that's my plate and I'm happy with it.

Did the pandemic have an effect on your lifestyle?

Some of my overweight problem was due to the pandemic. I was exercising less as I wasn't leaving the house much and, while working at home, I found myself using the excuse of a screen break to have a quick snack.

I used to go into the office three days a week – I work part time fundraising for

Action for Stammering Children and now for Blood Pressure UK as well. I used to walk two miles to work from Euston Station and back again and that four miles really helped.

Now I try to get out every day for at least half an hour. It's very easy for a week to pass and realise I've barely been out so I try and be quite structured about it and also go for a more serious walk at the weekend. My partner and I try to get out to the countryside. Our favourite walk is a hilly 6 miles so it's a good one, and it's enjoyable. It's great for emotional wellbeing as well, I really notice if I haven't been and feel much better when I have.

What are your numbers like now?

They fell rapidly due to the medications, diet and exercises but they're still a little too high – over 130/80mmHg. They've

plateaued recently which has been a little dispiriting so I'm going to make an appointment with my GP as we both think another medication will make the difference. It was a relief to see my numbers coming down and I'm confident I can get them down further.

How do you feel about taking medications?

I was reluctant at first but my GP said to get to 56 and only be on one medicine (I take statins for cholesterol) was really good going. If my GP says it, I'm happy to go with it! With age, your blood pressure does go up and lifestyle changes won't necessarily be enough, so it's quite normal to take medicines.

Is there anything you'd like to say to other people with high blood pressure?

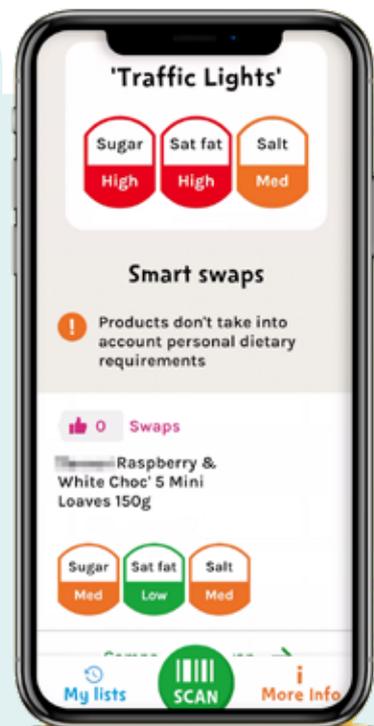
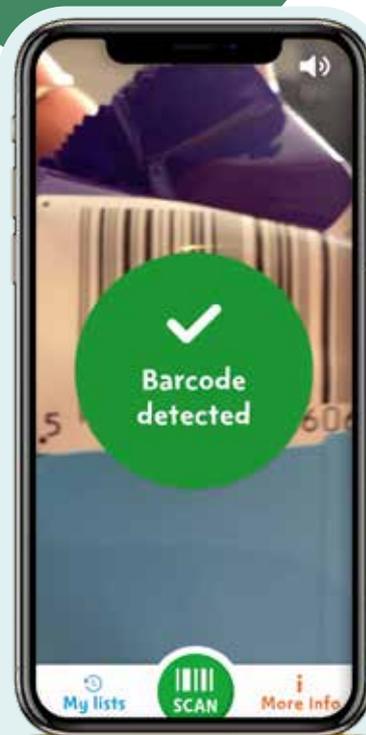
Losing weight has made a great difference to me already. I feel much better and have more energy. I'd only ever tried half-heartedly before but having the motivation, being fairly structured about it and seeing the numbers come down really spurred me on. I've found it much easier than I expected, so why not try it? Maybe you will too.

"It's OK to have an evening off. Life is short, you have to enjoy yourself."

Scan, swipe, swap

Find healthier foods with the free Food Scanner app

There are lots of apps to help you make healthy changes. We like the NHS's free Food Scanner app to help you choose healthier food products when you're out shopping. Simply scan the barcode of your chosen food with your phone and the app will show you healthy swaps with less salt, sugar and saturated fat. Lots of small changes add up throughout the week, whether you're choosing ham, pizza or breakfast cereals. You might be surprised by the difference switching to a different brand can make.



Download the app to help lower your blood pressure.

Errors in blood pressure measurement

By Professor Gareth Beevers

Over the last two years we have become used to seeing television interviews with harassed general practitioners discussing the impact of Covid-19 on their workload. But on one occasion I was astonished to see that the doctor had an old-fashioned mercury blood pressure machine (a sphygmomanometer) on his desk. For a moment, I thought it must have been archive footage, but their conversation was clearly up to date.

So, I thought it was time to review the whole issue of blood pressure measurement and its sources of error. These can conveniently be classified under four headings: the manometer (such as the sphygmomanometer on this gentleman's desk), the arm cuff, the patient, and the observer.

The manometer

Measuring blood pressure by attaching a mercury column to an air-filled arm cuff dates back to Italian pathologist Scipione Riva-Rocci in 1896, when he created the first ever sphygmomanometer. The idea of listening to the turbulence sounds at the front of the elbow dates back to the Russian pioneer of vascular surgery, Nicolai Sergeivich Korotkoff, in 1905, which enabled doctors to hear both the systolic and diastolic blood pressures (the top and bottom numbers).

The problem with using a sphygmomanometer and a stethoscope is the failure of adequate maintenance of the equipment; mercury can oxidise and stain the inside of the glass column, so they need regular cleaning and servicing.

Figure 1a shows a manometer in the A&E department at City Hospital, Birmingham. This photo was taken in



Fig 1a
A mercury manometer attached to the wall in the A & E department, City Hospital 1984
 The screws attaching it have been removed but it would not come away. It is impossible to read the lower numbers.
 Reproduced from Hypertension in Practice by Beevers DG, MacGregor GA. Martin Dunitz Publishers 1987

about 1984 and the machine had clearly not been serviced since the department was built in 1960. A sphygmomanometer was screwed to the wall behind each examination couch, but no one had thought to take them off the wall when the department was being repainted. The decorators had clearly painted round them.

Paint must have seeped under the manometer, so when someone tried to prise it off the wall, it was stuck down. The screws were removed to no avail, but a hammer and heavy screwdriver would do the trick. No wonder it hadn't been serviced.

In A&E departments, high blood pressure is rarely a problem; rather, it is low blood pressure. Emergencies like serious injuries, intestinal haemorrhage and cardiac crises are common problems that require the accurate measurement of blood pressure. In figure 1a, it is impossible to see the top of the mercury column (meniscus) which is necessary for a reading when the blood pressure is very low. It could be anywhere between zero and 50mmHg, and zero may even be below the zero mark on the glass column given the amount of dirt and mercury oxide lining the glass tube. Figure 1b shows what a mercury manometer should look like when not in use.

Aside from maintenance, the other problem is that mercury and its salts are toxic.

Liquid pure mercury (quicksilver) is only hazardous with prolonged exposure. When I was a boy, I had a febrile illness (fever) so my mother called our GP. She took my temperature with her mercury thermometer in my mouth, but things went wrong when I bit the bulb of the thermometer and swallowed a tiny quantity of mercury, but the GP wasn't worried: "*it won't do him any harm*". And indeed it didn't... well, I don't think it did.

The long-term effects of unprotected occupational chronic mercury exposure, mainly to industrial workers, are serious. They are mainly seen in the brain and nervous system. The symptoms are memory loss, reduced energy, depression, tremor, jerky movements and apathy.

One source of mercury poisoning was

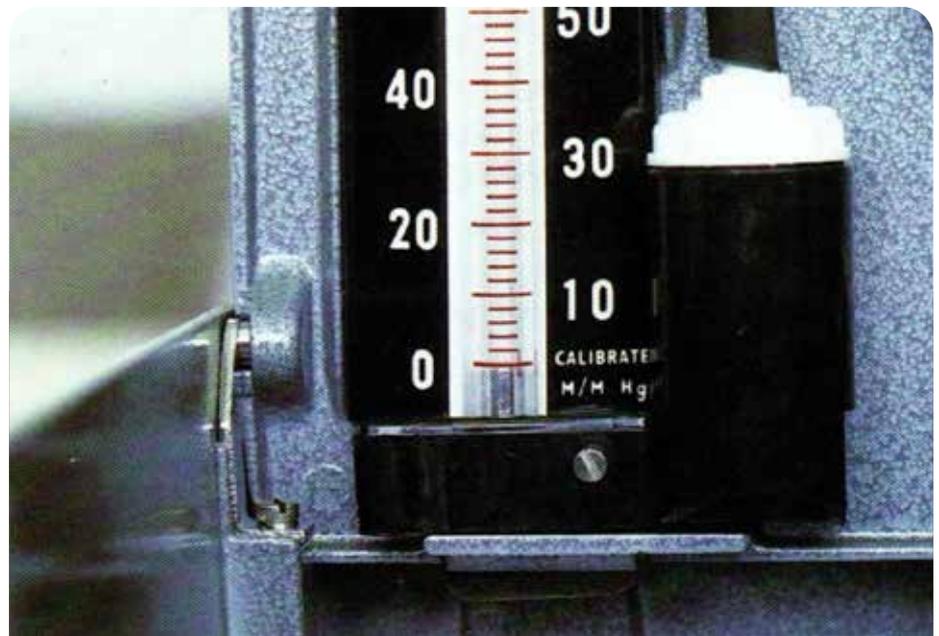


Fig 1b

A new sphygmomanometer

This is what the mercury column should look like.

Reproduced from *Hypertension in Practice* by Beevers DG, MacGregor GA. Martin Dunitz Publishers 1987

in the manufacture of felt hats. Lewis Carroll's mad hatter in *Alice's Adventures in Wonderland* in 1865 was presumably wearing a felt hat, however the hatter's behaviour in Alice is quite unlike mercury poisoning.

We now have reliable electronic semi-automatic blood pressure recorders. One source of error is now history, but I can't bear to think of the amount of spilt mercury under the floorboards of many of the ramshackle and obsolete hospitals like City Hospital where I spent most of my working life.

The arm cuff

There are two potential problems with the cuff; its size and where it is applied. If a standard cuff is used on a large

upper arm, the blood pressure is overestimated. For example, if the person's arm circumference is 40cm, a standard cuff will be too small and the recorded pressure will be 10/7mmHg higher than if the right sized cuff is used. This difference could lead to a doctor prescribing antihypertensive drugs when they are not necessary. In view of the increasing number of overweight people in the population, it is crucial that larger cuffs are readily available. When I was working on the wards, a call for a large cuff would result in nurses rushing from ward to ward trying to find one.

Moving on to where the cuff is applied, all the research into the dangers of high blood pressure and the benefits of lowering it has been based on dozens of population studies and treatment trials, all of which relied on measurement in the upper arm. So, it defies logic to use readings taken from blood pressures measured with a cuff at the wrist or the fingers.

The cuff should be at the same level as the heart. This presents no problem with upper arm cuffs but it is very difficult with wrist cuffs when the arm is resting on a table or desk, below the level of the heart.

The worst enemy of accurate blood pressure measurement is conversation.

The patient

It will come as no surprise that acutely stressful stimuli cause an acute rise in blood pressure. A worried patient, hurrying to see their GP on a wet Tuesday evening surgery in February is likely to have blood pressure higher than usual. This will be even worse if he or she has not seen this particular doctor before, and if this doctor is also harassed.

Other factors to falsely raise blood pressure are unfamiliarity with the procedure, pain, a full bladder and anxiety about what the doctor will find. But the worst enemy of accurate blood pressure measurement is conversation. In the old days when we used stethoscopes to listen to blood pressure sounds, there was nothing more annoying than a patient who wouldn't stop talking. Even with modern equipment, this effect is not abolished. I always explain to my patients that there must be total silence whilst their blood pressure is being measured. *"Just sit very quietly, thinking nice relaxing thoughts... but not too nice!"*

If the pressure is raised it should be rechecked every minute, two or three more times. This can go a long way to minimise the so-called white coat effect where blood pressure is overestimated in the clinic.

The observer

In the days when blood pressures were measured using a stethoscope, one major error was the doctor or nurse. If either are a bit deaf, they won't hear the blood pressure sounds clearly. There is also the problem of subjectivity: there are times when the question of whether the sounds can or cannot be heard is a matter of opinion.

Many years ago, we made a video of ten falling columns of mercury together with recorded sounds – it showed the blood pressure on the sphygmomanometers falling with accompanying sounds from a stethoscope. When we showed it to a large audience, there was an amazing variation in the readings obtained. It was only after we showed the videos that we confessed we had not shown ten falling columns, we had shown five,



Editor Kay checking her blood pressure at home, and definitely not talking

repeated in random order. Some members of our audience were astonished when they discovered that their first readings differed significantly to the second.

Another source of observer error is known as terminal digit preference (or bias). Some observers may tend to read pressure up to the nearest 5 or 10mmHg mark on the mercury column whilst others may tend to read down. Imagine that two doctors decided to investigate whether the Scots have higher blood pressures than the Welsh. If Dr Hamish Hosie in Tobermory tended to read up, whilst Dr Owen Gruffydd in Llandudno tended to read down, the whole project would be invalidated.

In the 1980s my department took part in a major 32 nation study of salt intake and blood pressure. Strict standardisation of all measurements was necessary. All observers, including myself, had to be retrained in blood pressure measurement and carefully tested. It was like being back at school. The trainer and tester was a terrifying nurse from Chicago. She was about 5ft 2in, wore rather strange half-glasses, and seemed totally unable to smile. But her work was crucial. One or two rogue centres could ruin the whole project. We had to be, like Caesar's wife, above

suspicion. If we had not, the food industry, keen to cast doubt on the evidence that a high salt diet raises blood pressure, would have had a field day.

Conclusion

Almost all of the sources of error in blood pressure measurement have been overcome with the invention of modern automatic or semi-automatic manometers. Their use at home can abolish the white coat effect and improve clinical decision making, and stethoscopes should no longer be used except in rare special circumstances.

An important spin-off of the reduction in sources of error is that we can now obtain reliable blood pressure measures on millions of people. This is being used in research into the risk of heart attacks and strokes as well as the benefits of blood pressure lowering. British NHS data are now being used by researchers internationally.

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.

Positive Pressure Book Club

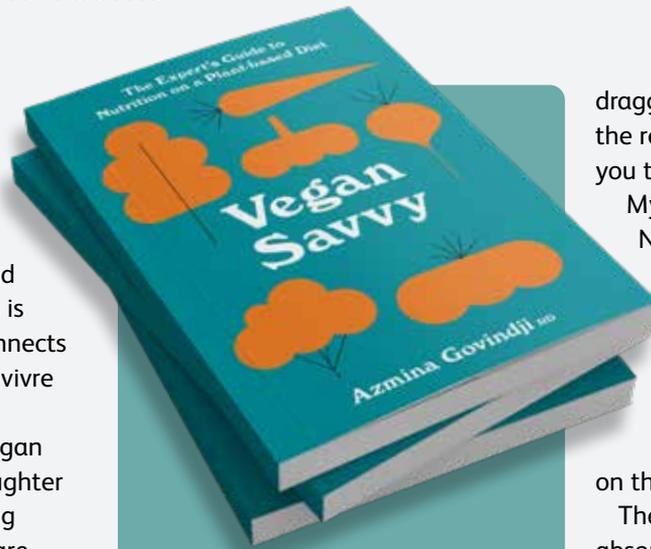
With so many books about health and wellbeing available, we thought it was about time we reviewed some.

I picked up a copy of *Vegan Savvy* after speaking with Azmina last summer for our interview about reaching people from different ethnic backgrounds. She was so fun and friendly, it was obvious that this is an essential part of how she connects with people, and it's this joy de vivre that brings this book to life.

Azmina began researching *Vegan Savvy* when her 23-year-old daughter Shazia announced she was going vegan. Young women and girls are already at risk of certain nutrient deficiencies such as iron, calcium and iodine, so cutting out meat and dairy is only going to exacerbate the problem, that is, unless your mother happens to be an award-winning dietitian and media nutritionist. Azmina was not only a health professional on a mission, she was a mother on a mission, and the result is a valuable resource that everyone can benefit from.

Vegan Savvy is a guide to getting all the nutrients you need from plant-based food while also making it enjoyable, affordable and as easy as possible. It's actually very useful even if you want to keep eating meat and dairy or shift the balance more towards plant-based foods. I would have loved to have had this book while I was at university (I studied nutrition) because it explains the foundations of healthy eating so clearly, it's like a scaffolding to hang the details off. That said, there's a lot of detail too.

She starts by addressing how to get in the right mind set before making a change, and moves on to her go-to advice for healthier eating – the VVPC plate. VVPC stands for veggies, veggies,



VEGAN SAVVY

The Expert's Guide to Nutrition on a Plant-based Diet, by Azmina Govindji RD
Review by Kay Dilley, Editor

protein, carbs, and describes the ideal proportions of foods that should make up your meals if you were to lay them out neatly on your plate. It's a simple model designed to de-mystify a lot of the media contradictions that often leave us wondering 'but what should I eat?'

She moves onto the three macronutrients – proteins, carbs and fats – and how to choose healthy options, followed by a deep dive into the micronutrients we tend to miss when going plant-based. Calcium, choline, iodine, vitamin B12 and selenium, for example.

I very much enjoyed the 'thought-lifters' dotted throughout the book, such as focusing on the times you've made positive changes rather than the times you haven't so you don't get

dragged down by the inner critic, and the research highlights which remind you this is all evidence-based.

My personal favourites were the Nutrient Bridges. These are tips and tricks that take you from not quite getting enough of a certain nutrient, to getting plenty. Or as she puts it, going from a good plate, to a savvy plate. There are a few examples on the next page.

There's a lot of information to absorb in one go, so I'm introducing changes one at a time and that's a perfectly healthy and realistic way to do it. I'm finding the summaries at the end of each chapter very helpful, along with the list of foods at the end which tells you which nutrients they contain, as well as the shopping lists throughout.

I can tell Azmina has put her heart and soul into this book. I've been a health writer for 12 years and it's one of the most evolved and helpful books on nutrition I've read. I highly recommend.



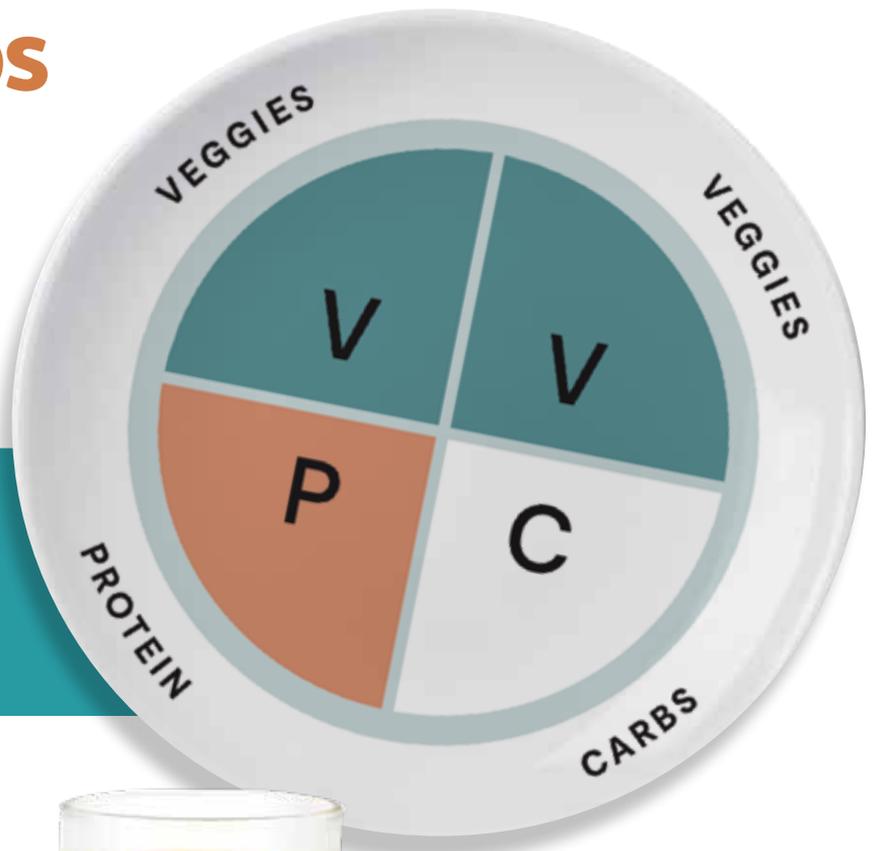
**HAVE YOU FOUND
A BOOK THAT'S INSPIRED
YOU TO CHANGE YOUR
LIFESTYLE?
LET US KNOW AT
info@bloodpressureuk.org**

Practical tips and tricks

A few of my favourite lessons and Nutrient Bridges from Vegan Savvy

THE VVPC PLATE

Imagine your meal laid out on the plate like this to see if there's anything missing, then you know if you need to add extra veg or have a piece of fruit afterwards, for example.



BIOAVAILABILITY IS A THING

Bioavailability is about how 'available' a nutrient is to your body. Carrots, for example, are rich in beta-carotene which is converted into vitamin A in the body, a fat-soluble vitamin. Adding a little fat to your carrots improves the bioavailability of beta-carotene – meaning you're more able to absorb it and make use of it as vitamin A. One study showed you could get 6.5 times the amount of vitamin A from carrots by stir-frying instead of eating them raw.



DRINK JUICE, NOT TEA

The vitamin C in fruit juices such as orange or lemon allow your body to absorb the iron in vegetables more easily. The tannins in tea on the other hand do the opposite. So, sip a little orange juice with your meals and drink tea only in between meals.

Choose colour

A wide range of colour means a wide range of nutrients – try these vibrant vegetable recipe ideas from Vegan Savvy.

RED BEETROOT DIP

Mix grated cooked beetroot with dairy-free yogurt alternative, a dash of lime juice, a sprinkling of garlic granules, chopped peanuts and freshly chopped parsley.

ORANGE VEG MEDLEY

Place layers of thinly sliced carrots, orange peppers, butternut squash and red onion onto a greased baking tray, flavouring with black pepper and fresh thyme between the layers. Drizzle with rapeseed oil and cover with about 100ml vegan stock. Bake for about 25 minutes at 200°C/gas mark 6 until the vegetables are tender.

PURPLE AUBERGINE BOATS

Cut an aubergine in half lengthways and remove most of the flesh, leaving you with a thin 'boat'. Roast the boats with some olive oil for about 20 minutes at 200°C/ gas mark 6. Meanwhile, dice the scooped-out flesh and sauté with chopped onion and garlic until soft. Season lightly, add freshly chopped parsley and stuff the cooked boats with the aubergine and onion mix. Scatter with grated vegan mozzarella and grill until melted.



IRON NUTRIENT BRIDGE

The vitamin C in the lemon juice helps you absorb the iron from the chick peas.

Drizzle lemon juice onto hummus

NUTRIENT BRIDGE

GOOD PLATE: CHICK PEAS

SAVVY PLATE: HUMMUS

ZINC NUTRIENT BRIDGE

Flavour with 1 tbsp nutritional yeast or use miso paste instead of salt

NUTRIENT BRIDGE

GOOD PLATES: SOUPS, STEWS, PIES, BURGERS, CHILLI

SAVVY PLATE: NOW WITH ADDED ZINC

OMEGA 3 NUTRIENT BRIDGE

Top up on healthy fats with these simple tricks.

Add a few walnut halves and chia seeds
Make salad dressings with rapeseed oil

NUTRIENT BRIDGE

GOOD PLATES: SALADS, SANDWICHES, PASTA

SAVVY PLATE: INCREASED INTAKE OF OMEGA-3

CALCIUM NUTRIENT BRIDGE

A surprising calcium hack for milk alternatives.

Shake the carton of fortified drinks

NUTRIENT BRIDGE

GOOD PLATES: FORTIFIED SOYA DRINKS

SAVVY PLATE: CALCIUM IN EVERY GLASS

TRY SOMETHING NEW

Some unusual store cupboard ingredients will help you top up on the more elusive micronutrients. Stir nutritional yeast flakes into chilli, pasta, soups and stews or sprinkle on your side dishes for extra B12 and zinc. Add roasted seaweed sheets to salads, pasta and dips for extra iodine – as a bonus, there'll be no need to add salt. But don't worry, there are only a few of these foods throughout the book so it's not overwhelming.

FANCY SHIFTING TO A MORE PLANT-BASED DIET?

The first three readers to contact us will receive a free copy of Vegan Savvy.

Simply email info@bloodpressureuk.org



MUSHROOM MOUSSAKA

Make a moussaka using wild mushrooms instead of minced meat. They bring a yummy umami flavour, especially if you use dried porcini mushrooms that have been soaked in water to bring out the richness.



PINK RHUBARB SLAW

Mix finely sliced rhubarb with shredded carrots and white cabbage. Shake a little olive oil, maple syrup, lemon juice and black pepper in a jar and drizzle this dressing over the slaw.



GREEN MEAN BROCCOLI CUISINE

Stir-fry small florets of broccoli in a little rapeseed oil. Add a dash of soy sauce and chilli flakes to taste. Finish with a drizzle of sesame oil and toasted sesame seeds.

Meet the experts

Dr Shahed Ahmad



Dr Shahed Ahmad is National Clinical Director for Cardiovascular Disease Prevention at NHS England and NHS Improvement. He talks to us about how he's working to save as many lives as possible.

Q HOW HAS YOUR CAREER LED YOU TO NHS ENGLAND AND NHS IMPROVEMENT?

I'm a doctor by background and I chose to go into public health because I feel that's where you can save the most lives and make the biggest difference with regards to health inequalities. I discovered that working in cardiovascular disease (CVD) was probably the best and fastest way to reduce inequalities, and my roles at NHS England and NHS Improvement provide an excellent opportunity to do that.

Q WHAT DO YOUR ROLES AT NHS ENGLAND INVOLVE?

As a Medical Director in the South East, I am the responsible officer for just over 3,000 GPs, and primary care is the bedrock of CVD risk factor management. As National Clinical Director for Cardiovascular Disease Prevention, our focus is on the detection and management of what we call the "A-B-C" of CVD Prevention; atrial fibrillation, blood pressure and cholesterol.

Q YOU'RE VERY VOCAL ON BLOOD PRESSURE – WHY IS THIS AN IMPORTANT FOCUS FOR YOU?

Pre-pandemic, calculations showed that the way to prevent the greatest number of strokes, heart attacks and cases of dementia was through blood pressure control. It has taken a hit during the pandemic and we want to recover that.

Q WHAT ARE YOUR TARGETS FOR PREVENTING CVD?

In our NHS Long Term Plan, we have an ambition to prevent 150,000 strokes, heart attacks and cases of dementia by 2029. For blood pressure, we aim to reach 80% detection and

80% control – so 80% of those with high blood pressure will be diagnosed, and 80% of those will have it under control.

Q HOW ARE YOU WORKING TO PREVENT CVD?

We have a four-pronged approach:

- ♥ One is with data. We've got some excellent sources of data in OHID (Office for Health Improvement and Disparities) and in the CVD Prevent data and improvement tool – which allows local and regional services to see how they're doing.
- ♥ Two is strengthening leadership. This is through Integrated Care Systems (ICSs), a national clinical leadership group I run, and a webinar series for clinical and managerial leaders.
- ♥ Three is supporting primary care. With the bloodpressure@home programme we distributed 220,000 blood pressure monitors to CCGs to give to their patients via GPs. We've also been encouraging blood pressure checks at vaccination centres, and through our community pharmacy blood pressure service, thousands of high street pharmacies are offering free blood pressure checks to over 40s.

♥ Four is public education – getting the message out. We supported May Measurement Month and will be supporting Know Your Numbers! Week this September.

Q WHAT ARE INTEGRATED CARE SYSTEMS (ICSS) AND HOW THEY CAN HELP?

ICSS bring together all the major stakeholders in health, wellbeing and social care. We're working with ICSs to reiterate the importance of blood pressure, sharing effective tools and interventions, and supporting ICSs to deploy them to disease. Firstly, because it's the right thing to do, but also because it can take the pressure off social care and hospitals.

Q HOW CAN BPUK AND NHS ENGLAND SUPPORT EACH OTHER?

BPUK has fantastic resources on managing blood pressure in multiple languages, and we really encourage the general public to make use of them. Blood Pressure UK is supporting the NHS to get this message out to people as one shared message: it's important to control your blood pressure as it reduces your risk of heart attack, stroke and dementia. Getting your blood pressure checked is easy – you can get it checked in pharmacies, at your GP surgery or get a blood pressure monitor to use at home.

Manage your blood pressure medicine the easy way

LloydsDirect simplifies your prescriptions so you can focus on making healthy choices. We remind you to take and reorder your medicine, and deliver it to your door – for free.



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NHS

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Cut the Salt – Season with Sense!

New research shows that as a nation, we're so addicted to salt that one in six Brits add it to takeaways, which are already notorious for being high in salt, as well as 21% simply using it 'out of habit'.

*"We need to take responsibility for our own health, by making small everyday changes. These include eating plenty of fruit and veg, reading food labels to find 'hidden salt' in prepared foods and using a reduced sodium salt like **LoSalt**®, which has 66% less sodium and can be used the same way as regular salt, without compromising on taste."*

- Dr Sarah Jarvis, GP & Media Medic



*"Often people may think that "low in salt" means "low in taste", but this isn't the case. **LoSalt**® is pinch for pinch the same flavour with no compromise on taste. It can be used in exactly the same way as regular salt, without any recipe adjustments needed, meaning it's an easy switch when cooking (or seasoning) which could make a huge difference."*

- Gary Maclean, Scotland's National Chef

CARAMELISED CAULIFLOWER TART

 Serves: 4  Prep: 35 mins  Cook: 20 mins

INGREDIENTS:

- 1 tbsp rapeseed oil
- 3 medium onions, peeled and finely sliced
- 4 sprigs thyme
- 1 bay leaf
- ¼ tsp **LoSalt**
- 1 medium cauliflower
- 4 sprigs rosemary
- ½ bulb garlic, crushed
- 75g butter, unsalted
- 200g puff pastry
- 1 egg yolk
- 4 spring onions, sliced
- Small bunch chives, chopped

METHOD:

1. Firstly, make the onion puree: Gently warm the oil and a little splash of water in a pan. Add the onion, a sprig of thyme and the bay leaf then season to taste with **LoSalt** and cover. Cook on a low temperature until the onion is soft but not coloured, remove herb stalks and blitz until smooth.
2. Meanwhile, break the cauliflower into florets, cut each floret in half and place flat side down in a non-stick pan. Add a few sprigs of rosemary and the remaining thyme, garlic, a pinch of **LoSalt** and the unsalted butter.
3. Cover with a disk of parchment paper (cartouche) and carefully cook on a low heat until the cauliflower is caramelised.
4. Take your pastry from the fridge and unwrap, roll out to ½ cm and cut the pastry into 15cm circles. Using the back of a butter knife, score a 1cm border around each circle of pastry, next pop them onto a non-stick tray or a tray lined with parchment paper. Brush with egg yolk.
5. Bake them in the oven at 210°C. You need a very hot oven to start the rise in the pastry, this should take about 10 minutes, just until they puff up and turn golden brown, then remove. Reduce the oven temperature to 180°C.
6. To assemble the tarts, spread 1 tbsp of puree on each pastry base. Then arrange the caramelised cauliflower on top of the puree.
7. When ready to serve, pop the tarts back into the oven for 5 minutes.
8. Finish with sliced spring onions and a sprinkle of chives.

For further information, expert advice and recipe inspiration, visit the Season With Sense online hub (www.seasonwithsense.com) and Instagram page: @SeasonWithSense



Have you thought of including Blood Pressure UK in your Will?

A lasting way to help others with high blood pressure

Finding out that you have high blood pressure can be traumatic, particularly if you are young. Most people don't know anything about the condition and worry about how it will affect them and those around them.



Blood Pressure UK

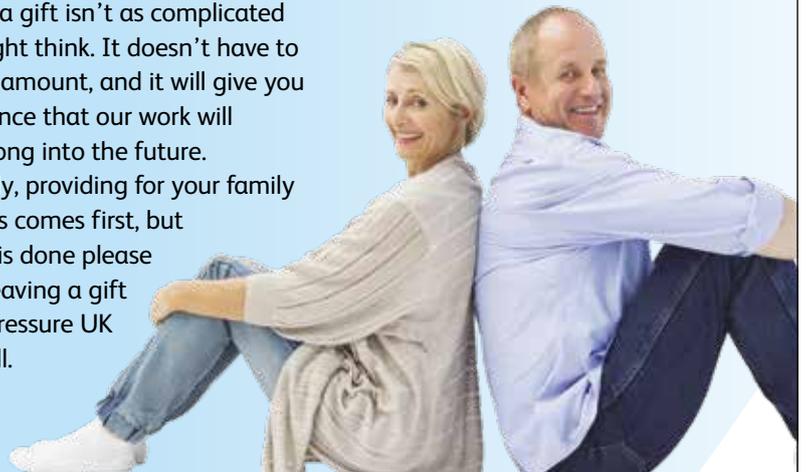
Helping you to lower your blood pressure

Blood Pressure UK is here to help. With our information packs, range of leaflets and our helpline, we provide reassurance and support to those who need it. All of this work is expensive, and while membership subscriptions and donations help enormously, leaving a gift in your Will can help us make a bigger difference.

Leaving a gift isn't as complicated as you might think. It doesn't have to be a large amount, and it will give you the assurance that our work will continue long into the future.

Obviously, providing for your family and friends comes first, but once that is done please consider leaving a gift to Blood Pressure UK in your Will.

We have put together a simple leaflet to guide you through the process. You can get a copy by telephoning (020) 7882 6255, visiting our website at www.bloodpressureuk.org or by writing to Blood Pressure UK, Wolfson Institute, Charterhouse Square, London, EC1M 6BQ.



The healthier alternative to salt

www.seasonwithsense.com

- ✓ Great taste
- ✓ Maximum reduction - 66% less sodium
- ✓ Easy switch - use just like regular salts

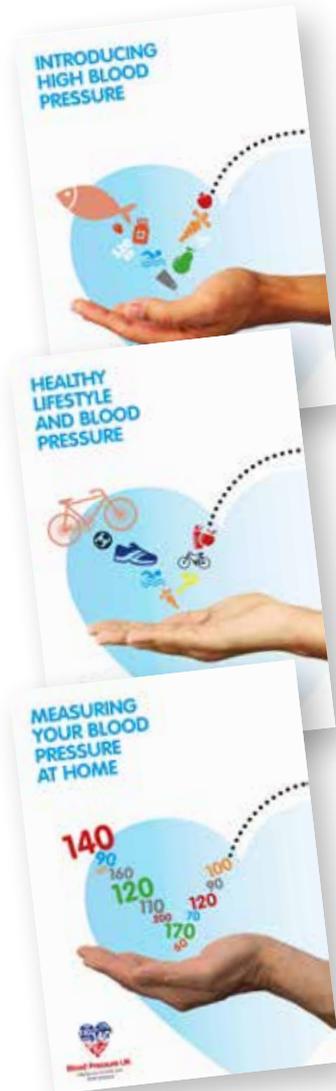




Information & publications

LOTTERY FUNDED

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.



Introducing high blood pressure

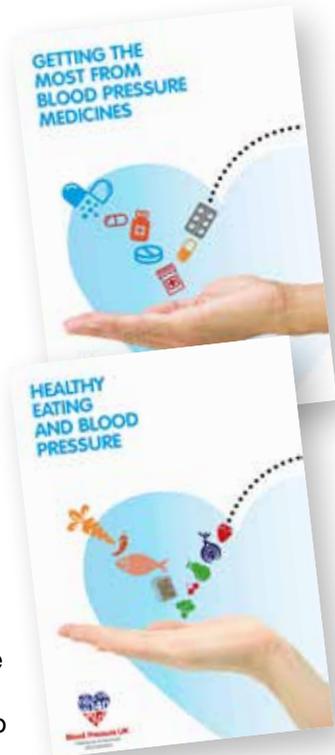
This booklet explains what high blood pressure is, who gets it and why. It gives basic information on lifestyle changes to lower blood pressure, and about measuring your own blood pressure at home.

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.



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. They are all available to download from our website only.



Blood Pressure UK

Helping you to lower your blood pressure

Our full range of resources includes 'Love your heart: a South Asian guide to controlling your blood pressure' and factsheets on all the common blood pressure medicines.

All these publications are free to Blood Pressure UK members. Visit www.bloodpressureuk.org for your copy.