

the magazine of Blood Pressure UK

ISSUE 44 > WINTER 2018

POSITIVE

pressure

THE INTRIGUING WORLD OF HYPERTENSION PHILATELY

The story of blood pressure through the medium of postage stamps

DOES CONTRACEPTION RAISE BLOOD PRESSURE?

Experts in maternal medicine put your worries to rest

YOUR NEW WORK OUT FOR THE NEW YEAR

Try this simple Pilates routine to get 2019 off to a healthy start

HOW TO SURVIVE CHRISTMAS

Survive the festive season in one piece with these happy healthy Christmas tips



Blood Pressure
UK

Helping you to lower your
blood pressure

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

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Welcome

From Katharine Jenner, Chief Executive Officer

Christmas and New Year often feel like a time for reflection, as well as a time for change. We find ourselves looking back at the highlights, and perhaps the lows, and thinking about what we'd like the next year to bring.

This year I had my second daughter, baby Audrey, and I've loved (almost!) every minute of it. As my little family grows, so do my ambitions for the future. For myself, my family, and for my passion in life – doing what I can to help people live long and healthy lives. Time flies so fast, at Blood Pressure UK we are trying to make every second count.

We've come a long way this year in the public health and hypertension world. Know Your Numbers! Week had a fantastic amount of support from dedicated teams fighting high blood pressure one check at a time. While our sister charity, World Action on Salt and Health, launched salt reduction campaigns in Malaysia and China to save lives in developing countries.

Meanwhile, researchers are changing our understanding of how blood pressure works and the ways it affects the body. Experts have found over 1,000 gene regions involved in blood pressure control, and broken new ground exploring how high blood pressure could affect the brain.

These developments and many more could bring changes in treatment surprisingly quickly. Medicines for other illnesses could be repurposed for blood pressure, and a triple pill could put an end to the trial and error of finding the right medicines.

So much has happened in just a year – the day when high blood pressure is no longer a threat to our health could be closer than we thought. I can't wait to see what happens next year.

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



A glamorous day out at Boden Central

We had a fabulous day out at Boden Central, Leicester, this summer, at the clothing company's Health and Wellbeing event. We checked nearly a hundred of the team's blood pressures and had queues for most of the day, but still had enough time for a quick tour of the warehouse.

LOVE CONSTRUCTION, LOVE YOUR HEART

CEOs, directors and managers of the construction industry queued up to see us at the Image of Construction event in London this September, during our Know Your Numbers! Week. Many wanted lifestyle advice and we were delighted to oblige, making the most of our newly-designed leaflets.



Science, Food and Society in Italy

Our Chairman, Professor Graham MacGregor, joined a team of experts in the Italian town of Parma, the capital of Food Valley, this September for a conference run by the European Food Safety Authority. They discussed the changes needed to dietary guidelines as they shift in focus from nutrient deficiencies to diseases of excess. Parma ham was not on the menu.



A MEETING OF MINDS IN CAMBRIDGE

We made our way to Cambridge in September for the British and Irish Hypertension Society's Annual Scientific Meeting – a forum for sharing, discussion and debate for professionals working in blood pressure. We took blood pressures at our stand and caught up on the latest in gene research, brain health and pregnancy.



Healthy food and drink showcase

We rubbed shoulders with the movers and shakers of the food industry at Food Matters Live 2018 at London's ExCeL this November. Our Chairman brought his years of experience to a panel discussion of how the industry can help us to eat and drink fewer calories when eating out.

OUT AND ABOUT

Taking action on sugar

We supported our sister charity, Action on Sugar, at the Sugar Awareness Week Reception in November at St Bartholomew's Hospital Great Hall. Schools, GP surgeries and libraries supported them in making as much noise as possible about the risks of too much sugar.



Beating high blood pressure

This year's Know Your Numbers! Week took the nation by storm after our research found that two thirds of the UK still don't know their numbers. (page 8).

Letters

Our Healthcare team is here to help

Dear Blood Pressure UK

I was very interested to read Professor Beevers' article on President Roosevelt in the last issue, and how high blood pressure may have affected modern Europe. Coincidentally, I have recently read the marvellous book, *Dinner with Churchill*, by Cita Stelzer.

The book explains that Roosevelt "died of a cerebral haemorrhage [stroke] two months after the Yalta Conference and a month before the war's end in Europe". Just too early to be there to witness this achievement. So sad. They did not have the blood pressure medication we are so privileged to have today, extending our lives and quality of life.

May I suggest a subject for a forthcoming issue of *Positive Pressure*? Many subscribers, particularly older, retired members, travel to the more remote parts of the world. These places include high altitude regions – Andes, Himalayas... There are even train journeys which ascend to 12,000 feet and trekkers can go much higher.

Blood pressure rises as the barometric air pressure decreases with higher altitude. In WWII President Roosevelt, when travelling by air, had to do so with the piston engine aircraft flying, unpressurised, at the lowest safe altitude.

Please will you explain the effects of altitude on blood pressure and any precautions to take? With so many members with raised levels of blood pressure of varying excess, albeit stable and controlled by medication, this would be helpful guidance.

Yours sincerely

Derek (Member from the outset of *Positive Pressure*)

HAVE YOU HAD EXPERIENCE OF CHANGES IN BLOOD PRESSURE AT ALTITUDE, OR TIPS FOR HOW YOU LOOK AFTER YOURSELF WHEN YOU'RE AWAY? WE'D LOVE TO HEAR FROM YOU.



Dear Derek

Thank you so much for your very interesting letter. That's a good question, as there is surprisingly little research on the subject.

There does seem to be a general view in the medical community that blood pressure may go up at high altitude. There's only a very small number of studies available, and they suggest that the rise varies between different people. But, encouragingly, it is not linked to a rise in serious problems such as heart attacks and strokes.

There doesn't seem to be any reason to avoid walking at high altitude if your blood pressure is under control, you are well, and you have never had heart disease or lung disease. And the sorts of altitude experienced in plane cabins, equal to around 6,000 feet, are unlikely to have much effect.

When you go away, just make sure you take your home monitor with you, so you can keep an eye on your blood pressure and make sure that it stays controlled. The high salt intake from restaurant and hotel food is more likely to raise your blood pressure than the altitude, and with a home monitor you can look out for changes.

Speak to your doctor before you go away to discuss taking any extra medications with you. For example, you could take a small supply of thiazide diuretics and take a very low dose, as this will get rid of the extra salt. Many people find this helpful, although the evidence is lacking, so speak to your doctor about what's right for you.

With best wishes, The Blood Pressure UK Healthcare Team

DEPARTMENT OF ERROR

In our review of President Franklin Roosevelt's stroke caused by high blood pressure in our summer issue, we included a photograph of the Mount Rushmore monument of four American Presidents. But the President Roosevelt at Mount Rushmore is, in fact, President Theodore Roosevelt, a distant cousin of Franklin. We apologise for this mistake. We wonder how many of our readers spotted it!

“The most major advance in blood pressure genetics to date”

Researchers discover 535 new blood pressure gene regions, guiding scientists towards more treatment options

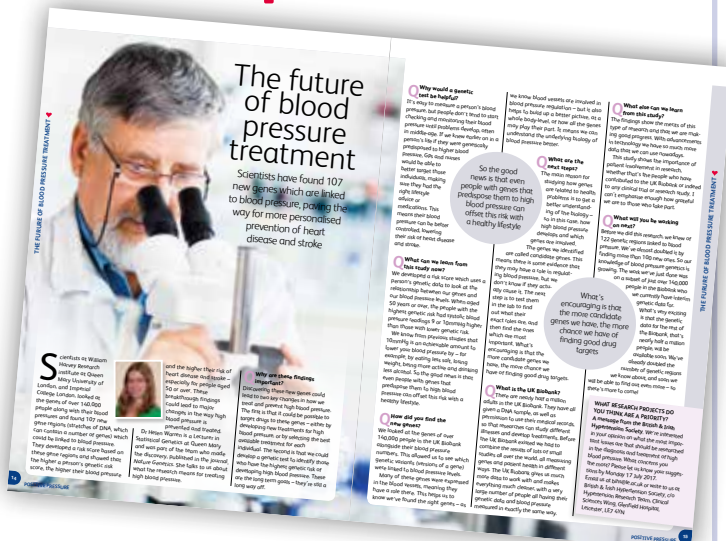
London researchers have discovered 535 new gene regions – specific parts of genes – involved in blood pressure control. This more than trebles the number of known gene regions to over 1,000.

The research involved more than one million people, including 450,000 from the UK Biobank project – where people have donated genetic samples and given permission to use their medical records so that scientists can find the genes involved in health and disease.

Prof Mark Caulfield, Blood Pressure UK Trustee and leader on this project, called this “the most major advance in blood pressure genetics to date.”

This time last year, the team had found just over 200 gene regions. In an interview for *Positive Pressure*, Dr Helen Warren, Lecturer in Statistical Genetics at Queen Mary and researcher on the project, explained that finding these gene regions means it could be possible to develop a test to see who is most at risk of high blood pressure, so that health professionals can step in early with lifestyle advice.

Dr Warren explains how this year’s findings bring them a step closer to their goals:



“This research is already helping us to find out which medicines that already exist could be used for high blood pressure, including medicines for type 2 diabetes. This could give doctors more options in a much shorter time than developing new drugs, and could be a major turning point for those who have side effects from existing blood pressure medicines.”

Blood Pressure UK SAYS *These findings have the potential to save thousands of lives every year and we can't wait to see the next stage in this research.*

50 COULD BE KEY AGE FOR LOWERING DEMENTIA RISK

Research suggests age 50 could be an important time for managing blood pressure.

London researchers looked at nearly 9,000 people in their 50s, 60s and 70s in a trial that began in 1985. They found that those who had systolic blood pressure over 130mmHg in their 50s, but not in their 60s and 70s, had a higher risk of dementia in later life. They also found that having high blood pressure for a longer time was linked to a higher risk of dementia.

The research, published this September, adds more detail to the studies showing that high blood pressure in midlife is linked to dementia later on. The authors commented that it could have implications for policy guidelines, which at the moment use the more generic term ‘midlife’ and are focused on blood pressure over 140mmHg, rather than 130mmHg.

Blood Pressure UK SAYS *Lowering blood pressure at any age has benefits, and this year the National Institute for Health and Care Excellence (NICE), who set health guidelines, will consider the best target for lowering blood pressure to, and it could be that 130mmHg saves more lives and prevents more illnesses.*

Feel like a hero at the London Marathon

We have charity places available for 2019's London Marathon, so this could be your chance to take part. Our 2017 runner JP said crossing the finish line made him “feel like a hero” as he was welcomed in by the cheering crowd and his baby daughter Sylvia. It's time to start training, so get in touch on 020 7882 6255 to find out more. We'll be on hand to support you along the way with phone and email support and training ideas.

Photo by Alex Iby on Unsplash

‘Remarkable’ long-term effect of blood pressure medicines

Important new study results show that blood pressure and cholesterol medicines help to prevent stroke deaths – even ten years after the study ended

In the ASCOT Legacy trial, London researchers followed up people who took part in the ASCOT trial, which began in the 90s, to explore the effects of newer classes of blood pressure medicines.

Almost 20,000 people with high blood pressure were given either a calcium channel blocker (Amlodipine) plus an ACE inhibitor (Perindopril) if needed, or the older medicines, a beta blocker (Atenolol) plus a diuretic (Bendroflumethiazide) and potassium if needed. Some people in each group were also given a statin (Atorvastatin) to lower blood cholesterol.

The trial ran for five years and was stopped early because of the obvious benefits of the newer treatments. Ten years later,

the medicines were still having an effect. Those who took both calcium channel blockers and statins were almost a third (29%) less likely to have died from a stroke.

The reasons for the long-term benefits aren't clear. It could be that the statins stabilised the hardened fatty parts of the arteries that can lead to blood clots, and the blood pressure medicines reduced variability in blood pressure.

The researchers called the results ‘remarkable’, explaining: “We have previously shown that statins confer long-term survival benefits after trials have stopped, but this is the first time it has been found with a blood pressure treatment.”

Blood Pressure UK SAYS *These long-term findings should give added reassurance to the doctors who prescribe blood pressure medicines, and those who take them.*

High blood pressure could be linked to Alzheimer’s disease

Another piece of the puzzle about how high blood pressure might affect the brain

Before now, studies have shown a link between high blood pressure and vascular dementia, where damaged blood vessels reduce the blood supply to the brain. Now, a new study has shown a possible link between blood pressure and Alzheimer’s disease – the most common type of dementia.

Nearly 1,300 people had their blood pressure measured every year until they passed away, at an average age of 89. The scientists, based in Chicago, then examined their brain tissue and found that those with higher blood pressure were more likely to have signs of Alzheimer’s disease. Including infarcts – areas of tissue which have died due to lack of blood supply – and tangles of dying nerves called tau.

The authors commented that the study could not prove that high blood pressure causes infarcts or Alzheimer’s but they’re planning further research to find out more. For example, whether those who lowered their blood pressure during the study had a lower risk of damage.

Blood Pressure UK SAYS *While the study found a possible link between blood pressure and brain infarcts, this did not mean those people were suffering with the symptoms of Alzheimer’s, so this is not a cause for alarm. But it is another piece of the puzzle about how high blood pressure might affect the brain.*

SMOKING CAN CAUSE ATRIAL FIBRILLATION

Researchers find smoking causes a type of irregular heart beat, known to lead to stroke

While some of the health effects of smoking are well known, scientists have made a surprise finding – that smoking raises the risk of atrial fibrillation, a type of irregular heart-beat which can lead to stroke. Researchers from Imperial College London looked at 29 studies from around the world in more than half a million people. They found that current smokers were a third (32%) more likely to have atrial fibrillation than people who had never smoked. The more a person smokes the greater the risk, but, encouragingly, quitting lowers the risk significantly.

Blood Pressure UK SAYS *Smoking can raise your blood pressure, and this current study shows it can lead to atrial fibrillation too. Both can raise your risk of stroke, and having both together raises the risk further. Most people with atrial fibrillation don’t know they have it, but it is surprisingly common. So, next time you visit your GP, ask them to listen to your heart beat to check. For help with quitting smoking, visit your GP or practice nurse or go to www.nhs.uk/smokefree to see the support available.*



Photo by rawpixel on Unsplash



Malaysia & China salt crack down

Global health experts take on high salt diets where it's most needed

Campaign group World Action on Salt and Health (WASH) are giving Malaysia and China a helping hand in improving the nations' health. They're launching salt reduction campaigns and getting government decision-makers on board to tackle high salt diets to lower blood pressure.

Around a third of Malaysians have high blood pressure, and the team secured £360,000 in funding to develop a salt reduction strategy.

Meanwhile, in China, salt intakes are troublingly high at 12-14g per day. WASH helped set up Action on Salt China, an international partnership which aims to lower salt intakes by 30% by 2025.



As salt intakes in developing countries are so high, even small reductions could save hundreds of thousands of lives every year.



HOME MONITORING HELPS TO CONTROL BLOOD PRESSURE

New evidence supporting home blood pressure monitoring could make it a key part of blood pressure management

A new trial published this year showed that GPs can use home measurements to adjust blood pressure medicines, bringing blood pressure down further than with the usual care.

Almost 1,200 people with high blood pressure were split into groups – some measured their blood pressure at home and sent their recordings to their GP, while others received their usual care.

One year later, those who monitored their blood pressure at home had their blood pressure lowered around 4mmHg further on average than those who didn't. The authors argued that home monitoring could become a cornerstone of blood pressure management.



This study shows that home monitoring helps to improve blood pressure control, because the results can help GPs to find the right dose of medicines. We look forward to more research to see how many lives it could save.



Photo by rawpixel on Unsplash

NEW 3-IN-1 PILL SHOWS PROMISE FOR HIGH BLOOD PRESSURE

A new pill which combines three blood pressure drugs lowers blood pressure further and faster than the current treatments

Scientists based in Australia have trialed a new pill which combines three common blood pressure drugs – telmisartan, amlodipine and chlortalidone – at half the usual dose. In a study of over 700 people, those given the triple pill had their blood pressure lowered by 70% within six months, compared to 55% in people who received their usual care.

This trial shows that using a combination pill could avoid the usual trial and error of finding the right drug combination, saving time and money, and meaning people could be less likely to give up. The authors argued it could help millions of people globally to avoid heart attacks and strokes.



This study clearly shows that a combination pill is far better than adding single drugs together step by step. We hope that a generic combination tablet will be available cheaply soon, so we can treat people more effectively at a low cost.



Two thirds of Brits don't know their blood pressure numbers and we set out to change that

Know Your Numbers! Week is the nation's biggest blood pressure testing and awareness event, where we go out in search of those who have high blood pressure and don't know it. It's our annual flagship campaign, and this was one of our biggest and brightest yet.

We were overwhelmed with support this year

Hundreds of health professionals and pharmacists set up pop-up venues known as Pressure Stations to offer free blood pressure checks to unsuspecting passers-by. They gave people the chance to understand their health, explaining the simple steps you can take to lower your blood pressure and prevent illnesses later on.

We took 8,400 people's blood pressures over the week

Many of those who came along to get tested had high blood pressure, and we won't rest until everyone knows their numbers.

We kicked off the week by measuring the blood pressures of 100 CEOs and directors at the Image of Construction event in London. It was a great fun and lively start, giving health advice to the construction industry's high-flyers.

“We thoroughly enjoyed doing the 1-2-1 sessions and it was nice to meet a variety of people. Feedback was really positive and we wanted this campaign to run for more than one week.”

Eaglebridge Health and Wellbeing Centre



Hemini Bharadia, our Marketing Manager, who organises the event, explained: “High blood pressure does not discriminate on age or gender – people are dying unnecessarily because they fail to take such simple steps to reduce their blood pressure. Know Your Numbers! Week is the perfect opportunity to have your blood pressure taken for free and put you in control of your health.”

“Hemini, thank you for everything with the Know Your Numbers! campaign, great week as always.”

Everybody Sport and Recreation



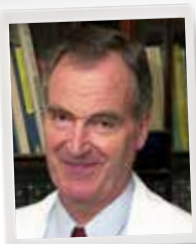
Public Health England's One You team made a special graphic for Know Your Numbers! Week. It promotes their Heart Age tool. Once you know your numbers, use this online calculator to get a good idea of your heart health. Visit www.bhf.org.uk/heartage.health.

Blood pressure still isn't a priority for many

We ran a survey of 2,000 UK adults which revealed there are still a lot of misunderstandings around blood pressure and it's simply not a priority for most people, making this year's campaign one of our most important and timely.

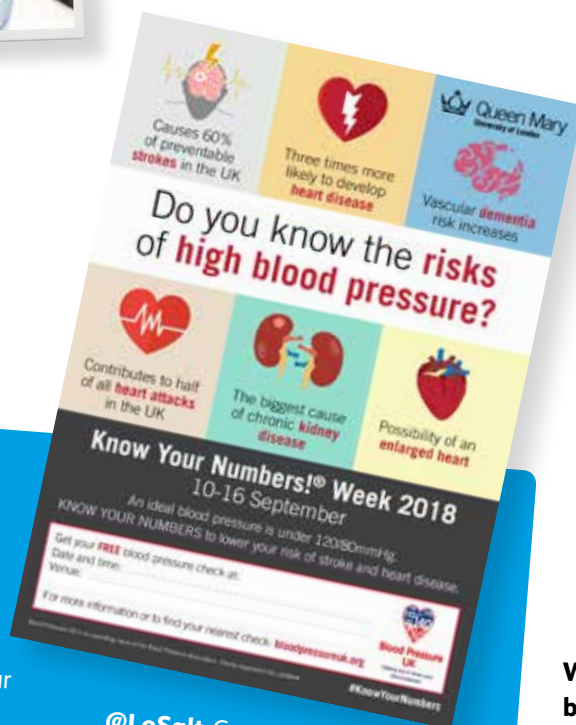
- **Two thirds (64%)** don't know their blood pressure numbers.
- **A quarter (26.7%)** would prioritise going out with friends over having a blood pressure test, and 15% would rather watch TV.
- **Four out of ten (39%)** are more worried about other health problems.
- **Two thirds (66%)** don't own a blood pressure monitor, and 16% only trust their GP to measure their blood pressure – so many people are missing a trick in looking after their health.
- **Only one in five (19%)** thought that people in their 30s should worry about their blood pressure. But high blood pressure and heart problems are becoming more and more common in our 30s, 40s and 50s, so adults of all ages should get a blood pressure test.

Professor Graham MacGregor, Chairman of Blood Pressure UK, says:



“High blood pressure kills thousands of people every year in the UK and is almost entirely preventable. It's imperative that everyone, including children, has their blood pressure taken at least once a year, and more regularly if it's a high reading, in consultation with their GP.”

We had our posters put up in motorway service station washrooms for two weeks to encourage people to go and get their blood pressure checked.



We trended on Twitter again this year with our hashtag **#KnowYourNumbers**

Our poster was seen by over 21,000 people on Twitter – our most successful poster on the social media site yet.

@EMS Healthcare

We love this from @BloodPress_UK Such a fantastic & engaging way to deliver an important #healthcare message!

@LoSalt Great initiative! We've got a whole week of videos, tips and information planned. **#KnowYourNumbers #GoLoForLife**

@PlusDane (housing association), tweeted: It was a great campaign, well done to everyone involved

We called for help for buying home blood pressure monitors Keeping an eye on your numbers at home can make all the difference in keeping them under control. We called for all families to invest in a blood pressure monitor, and for government subsidies for people at higher risk of health problems and with lower incomes. Take a look at our tips on the next page.

KNOW YOUR NUMBERS! AT HOME

How to get the most from your monitor

Using a home blood pressure monitor can be a really useful way to get to know your blood pressure numbers. You can see what your blood pressure is like in your daily life, and if your medications or lifestyle changes are working.

You don't need to be a health professional to use them. They're automatic, so you can measure your own blood pressure, and your friends' and family's too. Use these tips to get the most from your machine.

CHOOSING YOUR MACHINE

- 1 Choose a validated monitor.** Validated monitors have been tried and tested to make sure they're giving you accurate readings. The British and Irish Hypertension Society have a list of validated monitors on their website, bhsoc.org
- 2 Choose an automatic (digital) machine.** These are the easiest to use.
- 3 Choose a machine with an upper arm cuff.** As opposed to one that fits on your wrist or finger, machines with arm cuffs tend to be more reliable.
- 4 Stick to your budget.** You don't need to go for an expensive machine, it just needs to be clinically validated and easy to use. You should be able to find one for about £20 from large pharmacies or online.

USING YOUR MACHINE

- 1 Make an appointment with your doctor or nurse.** You can see a health professional when you first get started to make you sure you're confident using your machine. Follow the instructions that come with your machine too.
- 2 Take a few minutes to relax.** Before you take your reading, sit down quietly for five minutes so you feel calm and relaxed. Avoid smoking, caffeine, eating and exercising for half an hour, as they can make your blood pressure go up.
- 3 Make sure you're sitting comfortably.** Sit with your back supported and your feet flat on the floor. Rest your arm on a desk or table at the same level as your heart, keep your hand relaxed.
- 4 Place the arm cuff just above your elbow.** The cuff should be about 2cm above your elbow so it can detect the artery near the surface of your arm.
- 5 Keep still and quiet while you take your reading.** Moving, chewing, talking and laughing can all affect it.
- 6 Take two or three readings, each about one to two minutes apart.** If your first reading is much higher than the next, take another two or three and ignore the first one. Then work out the average. Don't round readings up or down, just copy them out as they are.
- 7 Keep a record of your measurements.** Record your readings in the memory of your monitor, on your computer or phone or on paper – anywhere you like. Just note the date, your readings and the average. You can add details like the time of day and any changes in medicines.
- 8 Take readings at the same time each day.** For example, first thing in the morning or last thing at night, as your blood pressure can vary throughout the day.
- 9 Don't check your blood pressure too often.** Some people find that they become worried or stressed about small changes in their readings if they take them too often.
- 10 Don't worry about small changes or one-off high readings.** Lots of things affect your blood pressure, long term changes are important, not changes day to day.



CUT OUT AND KEEP

A HISTORY OF HIGH BLOOD PRESSURE IN POSTAGE STAMPS

Many countries have issued postage stamps on medical topics. Some have been a part of public health campaigns, and others have commemorated the pioneers of medicine and their achievements. Whilst heart disease has received much attention, high blood pressure has been relatively neglected. Professor Gareth Beevers takes a look at the very interesting exceptions.

Early discoveries

High blood pressure did not become the focus of health stamps until the World Health Organisation named 1978 World Hypertension Year. But the realisation that a very strong pulse felt at the wrist was an indication of future illness dates back much further.

Hippocrates in Greece in about 400 BC and Avicenna in Persia a thousand years ago made this observation, as did Huang Ti, the Yellow Emperor, in China in about 2000 BC. These were the first known observations of what was later termed high blood pressure.

Stamp 1

Hippocrates & Avicenna on a stamp from Syria 1965, SG 877.



Learning that blood circulates around the body

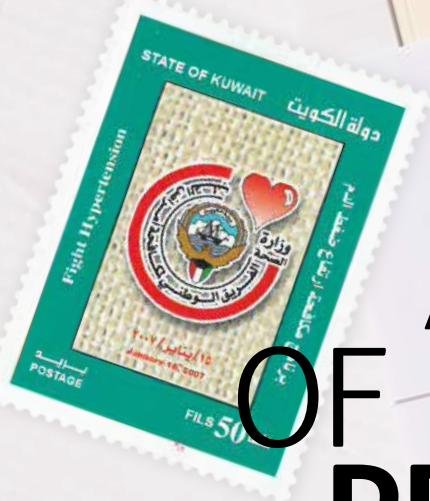
Further advances could not be made until the English physician William Harvey (Guiliemi Harvei Angli), often referred to as the founder of modern physiology, observed that blood circulates round the body. He convincingly argued the point in his book *De Motu Cordis* (On the Motion of the Heart), published in 1628. Until Harvey, it was believed that blood ebbs and flows in the body like the tides. Harvey is commemorated in stamps from many countries, including Britain. Perhaps the finest was issued by the Soviet Union in 1978, the 400th anniversary of his birth.

In those days microscopes weren't powerful enough to demonstrate how the



Stamp 2

William Harvey stamp from the Soviet Union, 1978, SG 4790.



deep arteries which carry blood away from the heart are connected to the visible bluish veins returning the blood.

The Italian anatomist Marcello Malpighi, armed with powerful microscopes, was able to see the connections – the arterioles branching off from the arteries, the fine capillaries supplying blood to the tissues, and the venules which allow blood to drain from the capillary beds into the veins (Stamp 3).

Inventing machines to measure blood pressure

Measurement of blood pressure in routine clinical practice was not possible until the Italian physician Scipione Riva-Rocci invented the mercury manometer in 1896. This invention might not have been recognised by the medical profession but for the interest of the American brain surgeon and polymath, Harvey Cushing (Stamp 4).

In 1901, Cushing visited Riva-Rocci in Italy, examined the mercury manometer, sketched it, and on returning to Baltimore, arranged for it to be made at Johns Hopkins Hospital. Cushing then ordered that blood pressure should be measured in all his patients.

This mercury manometer was an early form of the mercury blood pressure monitors that were universally used until the electronic machines we use today were developed – you may remember seeing them in hospitals and general

practice.

Harvey Cushing is also revered for describing one of the rare causes of raised blood pressure – a tumour at the underside of the brain – now called Cushing disease.

Developing modern medicines

Around the time that the mercury blood pressure monitors were coming into use, discoveries were being made into the causes of high blood pressure, in particular, the system of enzymes and hormones known as the renin-angiotensin system. Renin is a kidney enzyme which generates the powerful hormone, angiotensin II, which raises blood pressure.

Two classes of blood pressure-lowering drugs have been developed to block the renin-angiotensin system – the angiotensin converting enzyme inhibitors, known as ACE inhibitors, and the angiotensin receptor blockers, the ARBs. Both block the generation of angiotensin II or its actions and work very well at lowering blood pressure.

The discovery of renin

One stamp issued in Finland commemorates the discovery of renin by

**WE HAD A
POSTMARK TOO,
RAISING AWARENESS OF
HIGH BLOOD PRESSURE
DURING OUR 2017 KNOW
YOUR NUMBERS! WEEK.**



the Finnish physiologist, Robert Tigerstedt, in 1897 (Stamp 5). The stamp is somewhat cryptic. It marks the 31st International Physiological Sciences

Congress held in Helsinki. It depicts a heart, an eye, some sort of instrument and what is possibly a microscopic view of the retina. In the top right-hand corner are the profiles of two men, but with no mention of who they are or of the congress.

The Stanley Gibbons (London) catalogue tells us that the men are Ragnar Granit, the Nobel Prize winning Finnish ophthalmic physiologist (eye specialist) and Robert Tigerstedt. We know from an oil painting that Tigerstedt was a little overweight so presumably his is the more distant profile. Sadly, Tigerstedt was not awarded the Nobel Prize which he richly deserved. He was, however, on the Nobel Prize Committee.

The creation of beta blockers

The oddest stamp about high blood pressure is from Britain. It commemorates the creation of the first three beta-blockers by the Nobel Prize-winning pharmacologist, Sir James Black. Beta-



Stamp 3
Marcello Malpighi, who proved that Harvey was right; the blood does circulate around the body. A stamp from Transkei 1985, SG 177.



Stamp 4
Harvey Williams Cushing who introduced the mercury manometer to the USA. He won the Pulitzer Prize for his biography of Sir William Osler. USA 1985, SG 2129.



Stamp 5
A stamp depicting the discovery of the kidney enzyme, renin, by Robert Tigerstedt. Finland 1989, SG 1178.



Stamp 6
One of a set of stamps marking British Medical Breakthroughs, commemorating the synthesis of the beta-blockers by Sir James Black. Great Britain 2010, SG 3120.

blockers were a great break-through when they were introduced in 1965. Nowadays, they are mainly used in patients who also have heart disease. The stamp however will baffle most doctors (Stamp 6).

There is a ghostly image of what may be a heart, with a red electrocardiogram (ECG) which represents the electrical activity of the heart. This ECG bears no relation to anything we ever see in practice, but if you turn the stamp upside down it does begin to make some sense.

You can see four heart beats. The long downward “q” wave suggests this patient had a heart attack at some stage. Then after the tall upward spike there should be a tiny “s” wave pointing downwards followed by a broad “t” wave that looks a bit like a speed bump, but all we see is the beginning of the next heartbeat.

Very flat “t” waves, which may be what we are seeing here, occur in patients with dangerously low levels of potassium in their blood, which can cause abnormal heart rhythms. Being charitable one might comment that this stamp owes a lot to “artistic licence”.

A stamp from Belgium does depict an ECG which looks credible. The downward pointing “t” wave suggests very high blood pressure was reducing the blood supply to the heart. A mercury column down the side shows a systolic blood pressure of 200mmHg – very high (Stamp 7).

World Hypertension Year

1978 was designated World Hypertension Year by the World Health Organisation (WHO) and, for the first time, many countries around the world issued stamps focused on high blood pressure. Some were issued to mark World Health Day or Month, and most were devoted to campaigning for public awareness. The finest are from Pakistan with their simple clear message, ‘down with high blood pressure’ (Stamp 8).

Others indicate the harmful effects of high blood pressure on the heart, the kidneys and the retina, such as those from Uganda (Stamp 9).

Some stamps, including those from Bophuthatswana (Stamp 10), provide advice on how to avoid high blood pressure by preventing obesity, limiting salt intake and avoiding kidney infections, although they don’t make it clear how to do this.

There are no recommendations for exercising more, eating more fruit and vegetables or avoiding alcohol excess, and none have the equally important message that all people should have their blood pressure measured in the first place.

No stamps for strokes

Strangely, no stamps mention strokes which are possibly the most devastating consequences of uncontrolled hypertension, as was so tragically shown

with the premature death of US President Franklin Roosevelt who had extremely high blood pressure. He’s shown holding a cigarette in this stamp from the USA



(1982, SG 1927.) Britain later made up for this with a postmark supporting the Stroke Association in 2014 to 2015.

The future for postage stamps

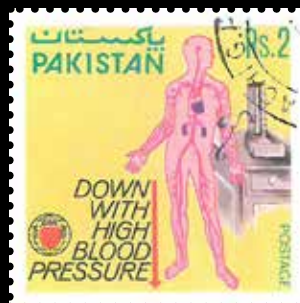
With the increasing move to emails and advanced information technology, one might speculate that the age of the postage stamp is over, but this does not seem to be the case.

Thousands of stamps are issued every year by every country around the world. Nowadays, many are issued to earn hard currency as they are bought up by collectors, so one could argue they are not really postage stamps. Even so, they are a fascinating marker of progress in medicine and a joy for collectors such as myself.

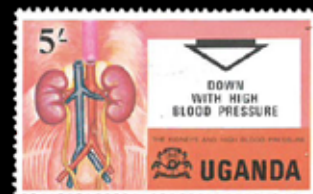
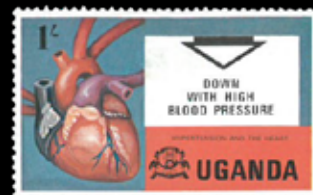
Professor Gareth Beevers is a Trustee and Medical Advisor for Blood Pressure UK. He is Emeritus Professor of Medicine, University of Birmingham and retired consultant physician, City Hospital, Birmingham. All the stamps shown are in the collection of the author, who is grateful to Dr Derek Connolly, consultant cardiologist, for his comments. The SG number indicates the Stanley Gibbons (London) catalogue number.



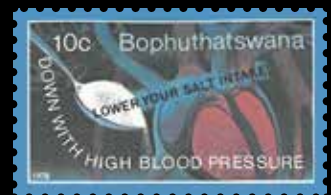
Stamp 7
A Belgium stamp with a very odd mercury manometer. It is red, though mercury was known as quicksilver. 1978 SG 1029



Stamp 8
One of two Pakistan stamps for World Hypertension Year 1978, SG 453-5.



Stamp 9
Two from a fine set of four stamps from Uganda 1978, SG 224-7.



Stamp 10
Two of three stamps from Bophuthatswana, South Africa, with some helpful advice 1978, SG 22-4.



Sarah Dilley

IS A PERSONAL TRAINER
AND PILATES INSTRUCTOR
BASED IN EXETER. SHE
SPECIALISES IN HEALTH
AND FITNESS FOR PEOPLE
WITH LONG-TERM
HEALTH PROBLEMS AND
RECOVERING FROM
ILLNESS AND INJURY.
WWW.SARAHDILLEYPILATES.CO.UK

Pilates breathing

THROUGHOUT THESE EXERCISES,
BREATHE IN THROUGH YOUR NOSE
AND OUT THROUGH YOUR MOUTH.
THERE IS ONE GOLDEN RULE –
DON'T HOLD YOUR
BREATH.

YOUR CORE *Pilates* PROGRAMME FOR 2019

Pilates is a type of exercise designed to improve your strength, balance, posture and bone health, and can work your heart and blood vessels too. So, we've enlisted the help of Pilates Instructor Sarah Dilley to put together a Pilates routine to get 2019 off to a healthy start.

WHY PILATES IS SO GOOD FOR YOU

Pilates is a gentle way to work out, based on controlled movement, stretching and breathing. It's particularly good for your core strength, which means it works the muscles that keep your spine safe and strong and improves your posture. It can give you good strength and mobility in all your joints, improving your balance and allowing you to move through a full range of movements safely – which is why it's so popular with dancers.

As Pilates is a type of strength and resistance work, it can also help to improve bone density. This means your bones stay strong and healthy, which is especially important in later life when bones tend to become weaker. Working through a Pilates routine can get your heart rate up too, helping you to look after your heart and blood vessels.



YOUR NEW ROUTINE FOR 2019

This set of simple exercises will work all the major muscle groups.

Do each exercise for about one minute, and rest for 30 seconds or a minute in between. Start with one set, and when you're ready, move onto two sets. Work through the routine at least three times a week to get the most from it.

TO WARM UP Wake up your muscles and get your heart working with a five to 10-minute warm up.

- **Marching on the spot.** March on the spot with marching arms, lift your knees up high and put some energy into your arms.
- **Side steps.** From standing, simply step to the side and bring the other foot in to meet the stepping leg, then step back the other way.
- **Shoulder rolls.** Standing up straight, lift your shoulders up and roll them down and backwards. Then change direction. Do eight rolls in each direction.

Check your posture

GET READY TO START THE EXERCISES WITH GOOD POSTURE. **STAND UP TALL THROUGHOUT YOUR ENTIRE BODY.**

LENGTHEN YOUR SPINE, KEEPING THE NEUTRAL CURVES.

CHECK THAT YOUR EAR, SHOULDER, HIP, KNEE AND ANKLE ARE ALL ALIGNED FROM THE SIDE.

KEEP YOUR TUMMY PULLED IN.



DUMB WAITER

From sitting or standing, start with your elbows by your sides and your hands out in front of you, palms facing up towards the ceiling. Keep your elbows against your body and move your hands out and back in.

Do this without an exercise band to start with to warm up your shoulders, then repeat using a band for resistance.

- This works your upper back and rotator cuff – the inside of the shoulder joint.

HIGH KNEE LIFT

Hold onto a chair or table for support, raise one knee up high and lower it back down again. Start with 10 slow ones, lifting your knee up and holding for five seconds each time. Then switch legs. Next do 20 quick ones to raise your pulse, alternate legs as if you are marching, but lift your knees higher.

- This helps with balance, works the muscles in your core and hips, and raises your pulse.

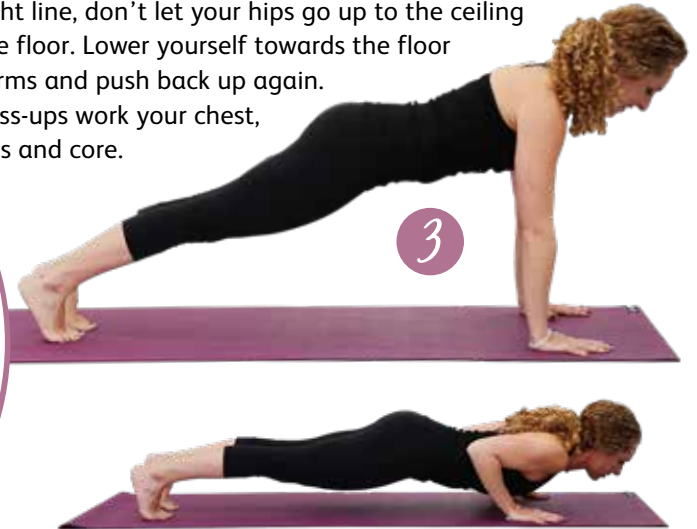


PRESS-UPS

When you first start, you can do press-ups against the wall from standing. Move your feet further away from the wall as you get stronger. Then move onto the floor for knee press-ups, working up to full press-ups on your feet.

For a full press-up, place your hands on the floor, level with your shoulders, a comfortable distance from your body. Push up into a plank position so you're in a straight line, don't let your hips go up to the ceiling or down towards the floor. Lower yourself towards the floor with your arms and push back up again.

- Press-ups work your chest, arms and core.



Exercise bands

ALSO KNOWN AS RESISTANCE BANDS, THESE ARE A VERY SIMPLE BUT HELPFUL PIECE OF EQUIPMENT. THERE ARE LOTS OF SIMPLE EXERCISES YOU CAN DO WITH THEM TO GIVE YOUR MUSCLES AN EXTRA WORK OUT WITHOUT RAISING YOUR BLOOD PRESSURE TOO HIGH. YOU CAN BUY EXERCISE BANDS CHEAPLY ONLINE OR IN SPORTS SHOPS.

SWIMMING

Start on the floor on all fours, think about pulling your tummy in towards your spine. Slowly raise one hand out in front of you, and at the same time raise the opposite leg out behind you – so you are balancing on one hand and one knee.



Return to all fours and repeat on the other side. Keep switching sides. Focus on your tummy muscles while you do this. To start with, you can simply do one arm at a time then one leg, and build up to arms and legs together.

- This strengthens your core and back, tones your tummy and helps with your balance.

V SIT WITH TOE TAPS

Sit on the floor with your feet flat on the floor in front of you and hold onto the backs of your knees. Keeping your back long and straight, tip your body backwards until you feel your tummy muscles fire up. Balance in this V shape. From here, you can lift up one foot at a time and lower it back down again. For an extra challenge, try lifting up both feet together and holding the position. From here you can do toe taps, where you tap one foot on the floor and lift it back up again, alternating feet.

- V sits work your core muscles.



Find a class near you

PILATES IS A POPULAR EXERCISE AND THERE ARE CLASSES AVAILABLE NATIONWIDE. FIND A CLASS NEAR YOU AT YOUR LOCAL SPORTS CENTER, OR ASK YOUR PRACTICE NURSE WHAT'S AVAILABLE LOCALLY. YOU CAN ALSO FIND VIDEOS ONLINE, FOR EXAMPLE FROM THE NHS.

BAND PULLING

From sitting or standing, hold your arms out straight in front of you, with your palms facing downwards. Pull the band, moving your arms out wide to the side.

- This works the muscles in your upper back.



CHILD'S POSE

To finish off your routine, reward yourself with a satisfying back stretch. With your knees on the floor, reach your hands out in front of you and place them on the floor. Sit onto your heels and imagine you are pulling the floor towards you with your hands. You will feel the stretch in your upper back.



SQUATS

Start from standing with your feet about a shoulder width apart and your feet turned outwards. Bend your knees to squat, and push back up again. Imagine you are sitting backwards onto a chair, so that your knees stay at 90 degrees, rather than letting your knees go forwards. From the side, your feet, ankles and knees should all be aligned, and your hips should be level with your knees.

- Squats work the muscles in your thighs and buttocks. They also get your pulse racing.



HOW MUCH WALKING DO YOU DO?

Get more activity into your day with the Active 10 app
Did you know that walking briskly for just 10 minutes a day counts as exercise? It gets your heart pumping faster and can make you feel more energetic. It can give your mood a boost too. Over time, it can help to lower your blood pressure and the risk of serious illnesses.

Public Health England have created the Active 10 app to show you how long you walk for, how fast and how far, and helps you build up to multiple 'Active 10s'.

Blood Pressure SAYS "Why not join the 600,000 people who have downloaded the Active 10 app so far? If apps aren't for you, try keeping an activity diary and see where you can fit more 'Active 10s' into your day."

How does contraception affect your blood pressure?

Hormonal contraceptives have been a popular form of birth control since they were first introduced in the 1960s. But can they raise blood pressure and the risk of health problems later on? Specialists in maternal medicine Dr David Churchill and Dr Cecilia Haglund explain.



Hormonal contraceptives work by using steroid hormones to stop a woman's eggs from being released each month (ovulation). They usually come as a tablet – known as 'the pill' – such as Yasmin or Microgynon, and they're available as injections, implants and patches too.

Many women who use these contraceptives in the long term see a rise in their blood pressure. It's not usually worrying because the rise tends to be small – around 4mmHg for systolic blood pressure (the top number) and 1mmHg for diastolic blood pressure.

Only a small number of women, around five in 100 (5%), will develop hypertension – where blood pressure stays consistently above 140/90mmHg.

The role of oestrogen and progesterone

Some contraceptives use two hormones, oestrogen and progesterone, known as the 'female sex hormones'. Others use only progesterone. It is the combined form, using both hormones, that can raise blood pressure.

At first, the effect was thought to be due to the oestrogen. Large studies in the 60s and 70s showed that women taking contraceptives containing oestrogen had higher blood pressure than those taking non-hormonal contraception. The amount of oestrogen used was lowered from 100mcg to 50mcg, and later to 30mcg – the amount usually used today – lowering the effect on blood pressure. Since then, studies have shown that, in fact, oestrogen and progesterone both play a part in raising blood pressure.

Hormonal contraception and your heart health

Hormonal contraception can have other effects on your heart and blood vessels. They can alter the levels of cholesterol and fat in the blood, and raise the risk of venous thromboembolism – blood clots in veins in the legs and lungs – and non-fatal heart attacks and strokes. But the risks in women of this age are still very low. Importantly, there is plenty of

evidence showing that the risks quickly drop back down to normal when you stop taking contraception.

Who should take hormonal contraception?

Before prescribing contraception, your doctor will want to get a good idea of your heart health. While the rise in blood pressure is often very small, it can be bigger in people who are already more at risk. For example, if you are older, you smoke, or you have had heart or kidney problems.

If you are offered a hormonal contraception, your doctor should tell you about the potential risks and how to recognize symptoms of blood clots, strokes and heart attacks. The contraceptive should contain a low dose of oestrogen (30-50mcg), and you should have your blood pressure checked regularly. If you do develop high blood pressure, your contraception should be stopped and you should be offered an alternative with a lower dose of oestrogen or with progesterone only. Your blood pressure should quickly go back to normal, so there's no need for blood pressure-lowering drugs.

A safe option

The evidence shows that hormonal contraception is a safe option for most women, as the rise in blood pressure and the risk of serious problems is small and easily reversed.

David Churchill is a Consultant Obstetrician (Maternal and Fetal Medicine) and Cecilia Haglund is a Foundation doctor in Urology at New Cross Hospital, The Royal Wolverhampton Hospital NHS Trust.



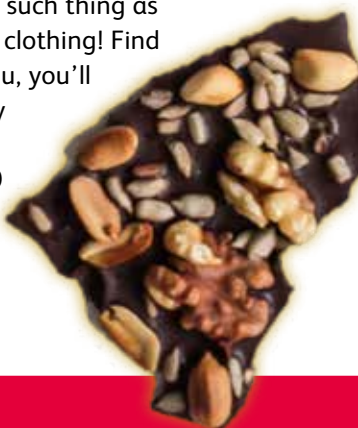
A happy and healthy *Christmas*

Cast aside the candy canes and feel your best throughout the festive season

We're allowed to let our hair down at Christmas. It's a time to enjoy life, make memories, indulge a little and have an all-round good time. If the party goes on throughout December in your house, see how you can be merry and bright without the season taking its toll.

Enjoy a wintry Christmas walk

As they say, there's no such thing as bad weather, only bad clothing! Find a country walk near you, you'll be surprised how many smiles you get on Christmas Day. Just 10 minutes of brisk walking will give your heart rate and your spirits a lift.



Go nuts for nuts

For some Christmas treats without the guilt, choose a bowl of nuts instead of chocolate. They're low in saturated fat and high in unsaturates so they're good for your heart, plus they're low in sugar so they don't rot your teeth. They're high in calories though, so don't go too crazy.

Dark chocolate is the treat of choice

Dark chocolate contains plant chemicals which could be good for your heart, without all the sugar.

Don't forget your wintry breakfast

If you start the day feeling full, it'll be easier to keep the delicious Christmas treats as treats. Go for a big bowl of porridge and give it a Christmas feel with some plain chocolate chips and cranberries or banana and cinnamon. Scrambled eggs on wholegrain toast are another filling and delicious option.



Photo by Roberta Sorge on Unsplash



Make bucks fizz your Christmas tipple

Enjoy a festive pick-me-up without the hangover. Bucks fizz fits the party mood perfectly, without all the alcohol units.

Try some herby flavourings

Ditch the salt and spice up your roast meat and vegetables with some more interesting flavours. Thyme, parsley, rosemary, orange, chili and garlic are all excellent choices. Perhaps with a little honey for good measure.



Photo by nordwood on Unsplash

Snack before parties

If you know you're going to a party with Christmassy snacks, don't arrive really hungry. Eat some fruit and nuts or vegetable soup and rolls before you go.

Indulge your inner child

Get up and be a bit silly with an animated game of charades or a comedy dance-off. Get into teams, get some fancy dress involved and get moving. It'll stop you becoming part of the sofa.

Fill up your plate at the buffet

If you find yourself at a big beautiful buffet table, pick up a plate and fill it with a variety of healthy options and a few treats as if it were one, big exciting meal, then call it a day. It's when you graze throughout the party that you eat more than you realise.

Keep drinking water

If there's bottles of bubbly, Irish coffee and port everywhere you look, give your hands something to hold and keep the hangovers away with lots of water. Alternate alcoholic drinks with water and keep sipping throughout the day.

Take a little time off

Say yes to the things you really want, and say no to the things you don't. Christmas can get us a little frayed around the edges, so take a little time out to sleep and give your brain a rest.

Explore some fruity desserts

Ditch the mince pies and ice cream and see the more inspired desserts you can come up with. Bake some halved pears and pop them back in the oven briefly with a little blue cheese sprinkled on top and drizzled with honey, finish off with some chopped walnuts. You could add some pineapple to a classic apple crumble. Or stew your favourite fruits and serve them with a big spoonful of low fat crème fraiche – stir in a little lime juice and a tiny bit of icing sugar for a tangy twist.



Do you have any healthy Christmas tips you'd like to share? Email us at info@bloodpressureuk.org or call 020 7882 6255.

Meet the Trustees

Gareth Beevers is Emeritus Professor of Medicine, University of Birmingham, and retired consultant physician. He is our Medical Advisor and has been a Trustee since Blood Pressure UK was formed.



Q How did your career in medicine begin?

When I qualified in 1965, I was sure I wanted a career in hospital medicine. I started in general medicine and kidney disease and I went on to work for blood pressure expert Michael Hamilton. He ran the first ever clinical trial proving that lowering blood pressure saves lives. I realised I loved the world of research.

Q What was your first research project?

With Michael Hamilton, I looked into the value of blood pressure lowering in patients who had suffered a stroke. In 1972 I moved to a world-famous blood pressure research centre in Glasgow and took on a project in the town of Renfrew, looking for the causes of high blood pressure. I looked at people with high and normal blood pressure and all sorts of things like salt intake, tap water lead levels and alcohol. I found alcohol intake was higher in those with high blood pressure.

In 1977, I took up an academic post as senior lecturer at City Hospital, Birmingham.

Q What clues did hospital life give you about blood pressure?

During my ward rounds I noticed that many of the stroke and heart attack patients were from African and Asian backgrounds. I went through ten years of medical data and showed that this observation was correct.

From here we launched The Birmingham Factory Screening Project – looking at blood pressure in people working in local factories. It was great fun and very exciting seeing all the machines and people working. And we confirmed that raised blood pressure was most common in Afro-Caribbean and South Asian people.

I HELPED DEVISE A STUDY TO PROVE WHETHER OR NOT SALT RAISES BLOOD PRESSURE. FAMOUS CHICAGO EPIDEMIOLOGIST JEREMIAH STAMLER SAID 'YOU THOUGHT THIS WAS JUST A PAPER EXERCISE, DIDN'T YOU? BUT WE'RE GOING TO DO IT!'

Q What is the INTERSALT study?

In the 70s, the salt hypothesis was derided, but I tended to believe it. As part of an epidemiology course, I helped devise a study to prove whether or not salt raises blood pressure.

Famous Chicago epidemiologist Jeremiah Stamler said 'you thought this was just a paper exercise, didn't you? But we're going to do it!'

At this time, I was approached by Lucas industries, who make car headlights and batteries. They'd heard about my work in factories and wanted my help looking at the health of their workforce. I told them about our plan and that's how we started

the INTERSALT study. It was done in 32 countries using rigorous methods with specially-trained researchers. It was the study that confirmed that salt intake in the population was linked to blood pressure numbers.

Q What are you most proud of?

Starting an academic unit at City Hospital, where such a thing had not happened before. I was very lucky because a lot of able people came to work with me, including David Churchill, who looked at blood pressure in pregnancy and how to improve care. By the time I retired in 2007 I had looked after 1069 hypertensive pregnancies.

Q What do you like to do for fun?

I read a lot. I love tracking down stamps with medical topics and I have found over 2000 so far. I love gardening and seeing my grandchildren, and I have great fun writing articles for Blood Pressure UK.

Q What do you do to look after your own blood pressure?

I am very slim and I hate salty foods. My blood pressure was slightly raised so I take candistartan and a statin, and I monitor my blood pressure at home.

Professor Beevers is an incredible support for the team and is always happy to help. He has given us great counsel and always entertains us with his wonderful historical features. We can't say thank you enough.

GoLo for life this winter

Too much salt in the diet is a major health issue but there are many small changes you can make to reduce your salt intake for a healthier lifestyle. Here, Sally Bee, TV presenter and healthy heart campaigner, and GP Dr Sarah Jarvis explain how LoSalt can help you stay healthy.



Sally Bee, TV presenter and LoSalt ambassador

As a five times heart attack survivor, I consider healthy food as my medicine and thrive on producing delicious dishes in a healthy way. My dishes are never about counting calories, they are all about flavour and health giving ingredients. I realised very early on that the food I ate affected my health and when I fed my body with good nutrients, it reacted in a positive way.

As a passionate foodie and cook, I know how a little salt is sometimes essential to bring out the delicious flavours of health ingredients but with the issue of high blood pressure in the UK on the rise, it's important to remember that continuously cooking with salt can create health problems. Using reduced sodium alternatives like LoSalt means I can continue to develop delicious tasting recipes without the guilt – like my butternut squash recipe here. LoSalt can be used in exactly the same way as regular salt whether it's seasoning, cooking or baking so there's no limit to the range of tasty recipes I can whip up.

Butternut Squash and Prawn Rogan Josh

Serves: 4 | Prep: 10 mins | Cook: 35 mins

2 tbsp olive oil
1 onion, sliced
1 butternut squash, peeled and diced into 1 cm cubes
4 tomatoes, roughly chopped
1 tsp cumin seeds
1 tsp paprika
2 tbsp medium hot curry powder
500ml low salt vegetable stock
500g peeled prawns
200g basmati rice
Juice of 1 lemon
Pinch LoSalt
Handful fresh coriander leaves

- Using a large non-stick pan, over a moderate heat, cook the diced onion and butternut squash for 8-10 minutes or until softened.
- Next, add the tomatoes, cumin seeds and pinch of LoSalt and cook for a further 5 minutes until the tomatoes are softened and pulpy.
- Stir in the paprika, curry powder and vegetable stock and bring to the boil.
- Now add the prawns and simmer gently for 15-20 minutes with the lid on a slant, leaving a little air hole.
- Meanwhile, cook the rice according to the packet instructions. Basmati rice takes 10-12 minutes once added to boiling water.
- When the rice is cooked, drain through a colander and wash through with extra boiling water to remove the starch and stop the rice from sticking together.
- Spoon the rice into serving bowls with the Rogan Josh on top. Serve sprinkled and lemon wedges to squeeze over before eating.



Advice from Dr Sarah Jarvis, GP and LoSalt Ambassador

Eating too much salt is one of the biggest risk factors for high blood pressure. If you're prone to high blood pressure, and all too many of us are, the more salt you eat, the higher your blood pressure will be. That means one of the easiest and quickest ways to lower your blood pressure is to reduce your salt intake.

All salt, whether its table salt, rock salt, sea salt or pink Himalayan rock salt, is 100% sodium chloride and it's the sodium which is linked to high blood pressure.

There are many ways you can cut down in the salt in your diet, such as cutting down on processed foods and avoiding seasoning food with salt at home. However, if you can't go without salt, then you are better to use a reduced sodium salt like LoSalt instead, which contains 66 per cent less sodium than regular salts.

Helping others with High Blood Pressure

Have you thought of Blood Pressure UK in your Will?

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

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

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

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



Blood Pressure UK

Helping you to lower your blood pressure

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



Looking to reduce your salt intake without compromising on taste?

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

Excess dietary salt is one of the most important modifiable risk factors for high blood pressure. **Switching to LoSalt**, the UK's number 1 reduced sodium salt will help you to maintain normal blood pressure.

So what is LoSalt?

The perfect blend of 2 natural mineral salts, LoSalt is the healthier alternative for seasoning, cooking and baking without compromising on flavour. And its simple to use...if your recipe requires 1tsp salt, use 1tsp LoSalt: it does the same, **tastes the same and has 66% less sodium!**

LoSalt, the natural choice for your table and kitchen cupboard

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





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.



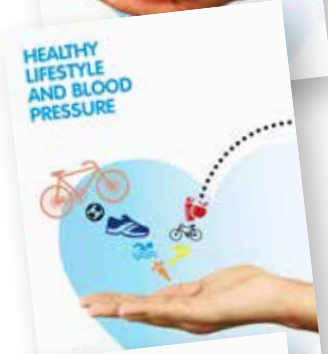
Introducing high blood pressure

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.



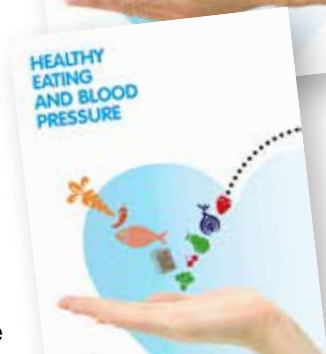
Getting the most from blood pressure medicines

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 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.



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.



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.



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. Call 020 7882 6255 for your copy or visit www.bloodpressureuk.org