



What is high blood pressure? [Click here](#)

The link between high blood pressure and the risk of heart attacks and strokes. [Click here](#)

How to reduce your personal risk of heart attacks and strokes. [Click here](#)

Treatment Option area	Treatment Options	Benefits	Harms and Side Effects
<p><b>Lifestyle</b></p> <p>Aim to reduce your risk of heart attacks and strokes rather than the even less certain goal of reducing your blood pressure.</p> <p>Lifestyle improvements will not affect normal blood pressure but should reduce the risk of future high blood pressure and make you feel better.</p> <p>Consider making more than one lifestyle change.</p>	<p>Change to a healthier diet</p> <p>Take regular exercise.</p> <p>Reduce your alcohol intake if your drinking is hazardous (15 or more units per week) or harmful (36 or more units per week)</p> <p>Stop smoking</p>	<p>Feel better.</p> <p>Expect a 30% reduction in your relative risk reduction of heart attacks etc, if you switch to a healthy diet option including the DASH diet, the Mediterranean diet, the Fast (5:2) diet or the low GI diet.</p> <p>Each daily portion of 7g of fibre reduces your risk of cardiovascular disease by 7% Consider taking 30g of flaxseed (linseed) daily e.g. on morning cereal or sprinkled on a salad.</p> <p>Reduce your sodium (normal salt) intake and increase your potassium intake. We recommend that you replace salt with healthy low sodium salt (eg lo-salt) (unless your doctor has warned you that you have a high potassium level or a serious kidney problem).</p> <p>Avoid dispersible tablets (except aspirin) they contain a lot of sodium. Avocado, spinach, pulses and beans and chicken are good choices for increasing dietary potassium.</p> <p>Avoid processed food this will make your food more tasty. Processed food usually has too much salt and also sugar. There are now health ready meal options.</p> <p>Feel better.</p> <p>Expect a 25% in your relative risk reduction of heart attacks etc, if you become more active (eg walking) for 90-150 minutes per week or 75 minutes of vigorous exercise (eg running, biking or swimming) or a mixture.</p> <p>Feel better. Please read the SBI tool (<a href="https://realgeneralpractice.org/assets/publication/SBI%20leaflet.pdf">https://realgeneralpractice.org/assets/publication/SBI%20leaflet.pdf</a>) to explore the other benefits of cutting back your alcohol consumption.</p> <p>Expect a 4 point drop in your blood pressure if you can reduce your alcohol intake towards a healthy intake. The benefit increases after time, since weight loss becomes much easier. You should also feel better and live longer.</p> <p>Feel better.</p> <p>Expect a variable reduction (eg 25-50%) in your relative risk of heart attacks etc if you stop smoking. And a 50% reduction in cancer after 10 years. Consider seeking support from a smoking cessation advisor. You may consider medication or nicotine replacement to help. Vaping is much less harmful than smoking (eg 90% less harmful).</p>	<p>None</p> <p>Food tastes the same with low sodium salt.</p> <p>Cooking from ingredients takes a few minutes.</p> <p>Planning and cooking your own food can be a real joy.</p> <p>Injury and cost.</p> <p>Consider using an app on your phone, a pedometer or a fit bit to monitor your activity.</p> <p>Withdrawal symptoms or DTs (Delirium tremens), the shakes or hallucinations and fits.</p> <p>None</p>
<p><b>Weight loss</b></p> <p>Ask your doctor if you might have sleep apnoea if you are overweight. Sleep apnoea greatly increases your blood pressure and your risk of heart attacks and strokes.</p>	<p>Lose as little as 5kg if you are overweight (BMI above 25)</p> <p>Calculate your BMI. If your BMI is above 25 you are considered overweight. If your BMI is above 30 you are considered obese; if your BMI is over 40 - severely obese.</p> <p>We suggest that you use the NHS healthy weight calculator <a href="https://www.nhs.uk/live-well/healthy-weight/bmi-calculator/">https://www.nhs.uk/live-well/healthy-weight/bmi-calculator/</a></p>	<p>Feel better and have more energy.</p> <p>Expect about a 1 point drop in blood pressure for each 1kg of weight loss if you are obese.</p> <p>If you are severely obese: bariatric surgery can help you to lose weight and resolves 62% of patients' high blood pressure.</p> <p>If you have type 2 diabetes, and lose 15-20% of your weight, there is a very good (86%) chance that your diabetes will be cured. This could lead to a 30-40% reduction in your relative risk of heart attacks etc.</p> <p>Weight loss can make a big difference to your risk of high blood pressure, heart disease, stroke, type 2 diabetes, arthritis, gallstones, sleep apnoea and colon and breast cancers.</p> <p>Sleep apnoea is a common cause of high blood pressure in people who are overweight and will often resolve with weight loss (even as little as 5kg). Treatment of sleep apnoea (including CPAP) can reduce your blood pressure and lower your relative risk of heart attacks etc by more than 50%.</p>	<p>Unlikely</p>
<p><b>Medications for blood pressure</b></p> <p>But if despite lifestyle measures, your blood pressure stays high, your GP may recommend a blood pressure tablet or two.</p> <p>We recommend that you use the absolute CVD risk/benefit calculator: <a href="http://chd.bestsciencemedicine.com/Calc2.html">http://chd.bestsciencemedicine.com/Calc2.html</a></p> <p>It shows patients and clinicians how relative benefits of treatment options translate to absolute benefits.</p> <p>Use the <b>Qrisk2</b> button in the UK.</p>	<p>1 in 10 people have to stop a medicine because of side effects from normal doses. This is much less likely with low doses. Usually it is more effective for you to use low doses (<b>at night</b>) of more than one medication. Consider using 1/2 tablets of the lowest dose tablet. Your clinician will guide you.</p> <p>Amlodipine 5mg daily (or lower)</p> <p>ACE inhibitors (not with A2) e.g. Lisinopril 5-20mg daily</p> <p>A2 drugs (not with ACE inhibitor) e.g. Losartan 50mg daily</p> <p>Thiazide diuretics e.g. bendroflumethiazide 2.5mg daily or indapamide 2.5mg (or lower)</p> <p>Aldosterone antagonists e.g. Spironolactone 12.5-25mg daily</p> <p>Beta blockers</p> <p>Alpha blockers</p>	<p>For example: If your average top blood pressure is 170:</p> <p>To prevent one heart attack (fatal and non-fatal) we have to treat 100 low risk people with blood pressure tablets for 10 years to prevent one heart attack.</p> <p>The benefit is more impressive if your absolute risk of heart attacks is higher (use the absolute CVD risk/benefit calculator).</p> <p><b>There is little evidence of much benefit for using blood pressure tablets if your blood pressure is less than 150, unless you have diabetes or kidney problems.</b></p> <p>No one <b>feels</b> better on blood pressure tablets.</p> <p>The absolute benefits of using blood pressure tablets are much higher if your risk is high, or if you already have vascular disease (heart attack, angina, stroke, peripheral vascular disease) eg 10 times greater.</p> <p>Do not reduce the risk of death or heart attacks or strokes unless you have heart failure.</p> <p>Do not reduce the risk of death or heart attacks or strokes.</p>	<p>Higher doses may cause ankle swelling</p> <p>10% get an irritating dry cough - if this happens use an A2 drug</p> <p>Blood test with each dose change and annually</p> <p>Blood test with each dose change and annually</p> <p>Not suitable in gout and may trigger gout</p> <p>Blood test with each dose change and annually</p> <p>Breast tenderness</p> <p>Not suitable in asthma</p>