

## Lifestyle Modifications to Manage Hypertension



LIFESTYLE MODIFICATION	RECOMMENDATION	APPROXIMATE SYSTOLIC BP REDUCTION (mmHg)	KEY REFERENCE(S)
<b>Maintaining a healthy weight</b> <a href="https://www.nhs.uk/live-well/healthy-weight/">https://www.nhs.uk/live-well/healthy-weight/</a>	Maintain normal body weight (BMI 18.5-24.9 kg/m <sup>2</sup> )	<b>5:</b> Expect about 1mmHg reduction for every 1kg reduction in body weight	The Trials of Hypertension Prevention Collaborative Research Group. Arch Int Med 1997;157:657-67 He et al. Hypertension 2000;35:544-9
<b>Physical activity</b> <a href="https://www.nhs.uk/live-well/exercise/">https://www.nhs.uk/live-well/exercise/</a>	Regular aerobic physical activity 90-150 minutes/week (e.g. brisk walking) or 75 minutes weekly of vigorous intensity aerobic activity (e.g. running) or a mixture of both	<b>5-8</b>	Kelley GA & Kelley KS. Hypertension 2000;35:838-43 Whelton et al. Ann Int Med 2002;136:493-503
<b>DASH (Dietary Approaches to Stop Hypertension) eating plan</b> <a href="https://www.nhlbi.nih.gov/health-topics/dash-eating-plan">https://www.nhlbi.nih.gov/health-topics/dash-eating-plan</a>	An evidence-based eating plan rich in fruits, vegetables, and low-fat dairy products with a reduced content of salt, saturated & trans fat	<b>11</b>	Sacks et al. NEJM 2001;344:3-10
<b>Salt intake</b> <a href="http://www.bloodpressureuk.org/microsites/salt/Home">http://www.bloodpressureuk.org/microsites/salt/Home</a>	Reduce dietary sodium intake to no more than 6g daily (1 teaspoon=5g) or 2.4g sodium	<b>5-6</b>	Feng et al. BMJ 2013;346:f1325
<b>Potassium intake</b> <a href="http://www.bloodpressureuk.org/microsites/salt/Home">http://www.bloodpressureuk.org/microsites/salt/Home</a>	Increase dietary potassium intake (e.g. bananas, avocado, sweet potato, spinach, pulses, & chicken) to 3.5-5g daily	<b>4-5</b>	Aburto et al. BMJ 2013;346:f1378
<b>Alcohol consumption</b> <a href="https://www.nhs.uk/live-well/alcohol-support/">https://www.nhs.uk/live-well/alcohol-support/</a>	The current UK guidelines advise limiting alcohol intake to 14 units a week for women and men. This is equivalent to drinking no more than 6 pints of average-strength beer (4% ABV) or 7 medium-sized glasses of wine (175ml, 12% ABV) a week.	<b>4</b>	Xin et al. Hypertension 2001;38:1112-17

Adapted from the *American College of Cardiology 2017 Guideline for The Prevention, Detection, Evaluation and Management of High Blood Pressure in Adults* (Whelton et al. Hypertension 2018;71:e13-e115)

### Notes

- The effects of implementing these modifications are of course individual, and combinations of 2 (or more) lifestyle modifications are synergistic
- For comparison, the average systolic BP reduction from 1 antihypertensive drug is **12.5-15.5mmHg** (Wu et al Am J Hypertension 2005;18(7):935-942) and around two thirds of hypertensive individuals cannot be controlled on 1 drug and will require 2 or more antihypertensive agents from different drug classes (Cushman et al. J Clin Hypertension 2002;4:393-404)
- Blood Pressure UK <http://www.bloodpressureuk.org> provides helpful information supporting those with high blood pressure and also healthcare professionals managing hypertension