



# Relieve the pressure

High blood pressure can be a slow, silent and deadly condition.

So how do we fight back? Anne-Marie Williams reports

**H**igh blood pressure, or hypertension, is often known as a silent killer as it is a condition that has no symptoms until it is too high. The symptoms may be rare but the consequences are not: high blood pressure or hypertension is an important risk factor in coronary heart disease, stroke and kidney failure. A study published in the American journal *Hypertension* notes that public awareness of the dangers of high blood pressure and the importance of controlling it to prevent heart disease and stroke has declined. It is estimated that one third of those suffering from high blood pressure are not aware of it. The good news is that blood pressure can be controlled by taking important lifestyle measures that will have the benefit of improving general health and well being.

#### ● EXPLAINING BLOOD PRESSURE

Blood pressure as the name suggests, is the pressure of blood as it is pumped through the arteries by the heart. Blood pressure

measurements consist of two numbers: the higher number represents blood pressure during a heart beat, this is known as systolic pressure; the lower number represents blood pressure during the rest of the heart between beats and is known as diastolic pressure.

#### ● WHAT IS HIGH BLOOD PRESSURE?

The medical profession has known for a long time that older people are at an increased risk of high blood pressure. However, a new study suggests that 90 per cent of those who are middle aged and older risk developing high blood pressure. Also known as arterial hypertension, it is considered to be a reading of above 140/90mm Hg. A reading of 130/85mm Hg needs to be monitored regularly. Ideally

systolic blood pressure should be 120mm Hg and diastolic pressure 70mm to 80mm Hg.

#### ● CONSEQUENCES OF HIGH BLOOD PRESSURE

High blood pressure damages the body's organs, and so shortens the life span. It also increases the risk of coronary heart disease and strokes, contributing to 75 per cent of all strokes and heart attacks. Someone with a blood pressure of 140/90 mm Hg has a 100 per cent higher risk of stroke compared to a person of the same age who has a blood pressure of 125/75 mm Hg. High blood pressure is also responsible for 30 per cent of cases of kidney failure. It is also the number one cause of congestive heart failure (CHF), a condition where the heart is unable to pump enough blood

around the body in order to meet the different organs' needs: people with uncontrolled high blood pressure are six times more likely to develop CHF. High blood pressure also hastens the hardening of the arteries (atherosclerosis).

● **PREVENTING HIGH BLOOD PRESSURE**

The first step to be taken to avoid and control high blood pressure is to monitor it regularly. Guidelines from the British Hypertension Society recommend that all adults should have their blood pressure measured every five years until the age of 80. For those who have had high readings, their blood pressure should be measured annually. Women who take the contraceptive pill should have their blood pressure monitored every six months, as oral contraceptives tend to increase blood pressure.

Many cases of hypertension can be controlled by making a few simple changes to lifestyle patterns. Lifestyle modifications can also substitute or at least enable a reduction in medication in those who are prescribed drugs to control their blood pressure. By making changes it is possible to reduce the risk of developing hypertension with age. Various controlled medical trials, which have taken place in the last ten years, have confirmed that changes in lifestyle and diet considerably reduce blood pressure as well as cardiovascular risk.

● **WEIGHT WATCHING**

Being overweight is one of the most important factors causing high blood pressure. The good news is that this means that weight loss is also one of the best ways of lowering blood pressure without having to resort to drug therapy. Blood pressure is reduced by 2.5/1.5 mm Hg for every kilogram (about two pounds) of weight loss. There is no need to turn to expensive dieting techniques in order to lose weight, as these unnatural techniques are rarely successful in the long term. In order to lose weight and keep the weight off it is necessary to eat a balanced diet and exercise regularly. Only by burning more calories than are eaten will weight be lost.

● **DIET**

A sensible diet not only helps ensure against weight gain but it is also an important factor in preventing and controlling high blood pressure. However, being slim does not necessarily mean that a person is healthy or that they have normal blood pressure. A diet rich in fresh fruit and vegetables is vital in maintaining good health in general and a normal blood pressure in particular. Salt (sodium) has an adverse effect on blood pressure. By reducing daily salt intake from ten to five grams (five grams is equivalent to one teaspoonful of salt) blood pressure is reduced by 5/3 mm Hg, the fall in blood pressure will be even greater in the elderly. The DASH-II (Dietary Approaches to Stop Hypertension) trial

has also shown that African-Caribbean people have the greatest decrease in blood pressure with dietary salt reduction. Salt can be replaced with mineral salt alternatives or by tasty herbs and spices, which also have the bonus of being rich in vitamins. It is not only salt added to meals or during cooking that needs to be restricted or stopped altogether. Attention also needs to be paid to the hidden salt in the food we buy, especially in processed food and snacks.

This is why it is important to eat as many fresh and natural products as possible. Studies show that an increase in fresh fruit and vegetable consumption from two to seven portions daily results in a decrease of 7/3mm Hg in those suffering from hypertension. This is thought to be partly due to the high amount of potassium found in fruit and vegetables: a recent study published in the *British Medical Journal* notes that increasing potassium intake lowers blood pressure both in people with high blood pressure and, to a lesser extent, in those with normal blood pressure. Foods rich in potassium include citrus fruits, watercress, green leafy vegetables, sunflower seeds, bananas and potatoes.

● **ALCOHOL CONSUMPTION**

Current Department of Health guidelines recommend that men consume no more than three to four units of alcohol per day, and women not more than two to three. It is more important to control alcohol consumption on a daily rather than a weekly basis as binge drinking is an important stroke risk factor. Alcohol consumption of above 21 units per week substantially increases blood pressure and can cause hypertension, blood pressure decreases as soon as alcohol consumption is reduced.

● **EXERCISE**

Existing studies show that to lower blood pressure it's necessary to carry out moderate aerobic exercise of 30 minutes five times a week. Moderate means that the exercise should leave you slightly breathless and warm. Younger people can also benefit from carrying out vigorous exercise such as running. However, the most important thing is to exercise regularly and moderately rather than vigorously only at weekends. Increasing daily exercise can be as simple as walking or cycling to work and taking the stairs instead of the lift. ■

## Who is at risk from hypertension?

Certain categories of the population are at an increased risk from high blood pressure and these factors, unlike lifestyle, are not modifiable.

□ **HEREDITY** A family history of high blood pressure increases the risk of developing hypertension.

□ **GENDER** In general men are more predisposed to developing hypertension than women. However, the risk increases for women during pregnancy and after the menopause: hypertension occurs in up to ten per cent of pregnancies.

□ **AGE** Blood pressure increases with age, especially after 35.

□ **RACE** African-Caribbean people are more likely to suffer from hypertension, with up to 50 per cent suffering after the age of 40.

## High blood pressure in stages

	Systolic blood pressure (mm Hg)	Diastolic blood pressure (mm Hg)
High norm	130-139	85-89
Stage 1	140-159	90-99
Stage 2	160-179	100-109
Stage 3	180	110

## Resources...

- The British Hypertension Society, the site includes coronary heart disease and stroke risk calculators: 020 8725 3412, [www.hyp.ac.uk/bhs](http://www.hyp.ac.uk/bhs)
- The British Heart Foundation: 020 7935 0185, [www.bhf.org.uk](http://www.bhf.org.uk)
- For general and scientific information concerning hypertension visit the American Society of Hypertension web site: [www.ash-us.org](http://www.ash-us.org)
- The World Hypertension League promotes prevention and control of hypertension and can be found at: [www.mco.edu/org/whl](http://www.mco.edu/org/whl)



## Prize draw

Keep track of your blood pressure with one of our fabulous competition prizes – the Braun Precision Sensor 2510. These cuff blood pressure monitors cost £65 in the shops, and we've got ten of them to give away. All you need to do is send your name, address and policy number on a postcard or sealed envelope to Precision Sensor Draw, Atom Publishing, 113 Farringdon Road, London, EC1R 3BX by 31 July 2002. The first ten names out of the bag win the prizes.

- For the prize draw rules, please see page two.