



Health Fact Sheet

High Blood Pressure

Why is Hypertension Dangerous?

Consistently high blood pressure puts long term pressure on the heart and circulatory system and can lead to heart failure or stroke. It can also be either a symptom or a cause of kidney disease.

One of the most common treatments for high blood pressure is diuretic tablets. This is because a high level of salt and excess water in the circulation is perceived to contribute to hypertension. We shall look at the implications of this later.

What is High Blood Pressure

There are several factors which contribute to high blood pressure:

- Arteriosclerosis – hardening of the arteries

- Atherosclerosis – deposits in the arteries

- Thick blood or blood clots – possibly caused by dehydration

- Arterial tension – caused by imbalance of magnesium, potassium and calcium in relation to sodium (salt)

It is also believed that hypertension is linked to the poor uptake of chromium by the body due to lack of exercise – an easy improvement to make.

- Lack of certain vital nutrients

- Stress and emotional upset

- Dehydration

As the heart beats it increases the pressure in the arteries, and in the space between beats the pressure decreases. These two – the systolic and diastolic pressures – combine to give you a blood pressure reading.

A normal reading is considered to be 120/80, whatever your age. There is a medical protocol that says a systolic pressure of 100 plus your age is 'normal' but there is little evidence to suggest high blood pressure is normal as you age, and much to suggest that high blood pressure is caused by the problems of aging badly.

Contrary to current medical thinking both arteriosclerosis and atherosclerosis can be improved and even reversed in some cases by nutritional supplementation.

Nutritional Approach to Hypertension

A lack of magnesium, potassium and calcium can increase the muscular pressure on the arteries and a substantial difference can be made to blood pressure just by increasing these nutrients. A high magnesium deficiency in particular can lead to sudden heart attack, and as magnesium is essential to help anything relax in the body, a lack of this will lead to tension in the arteries, therefore high blood pressure.

Calcium has also been shown to help regulate blood pressure, but most people get sufficient of this in their diet. Take ideally a food-state magnesium supplement or if you feel the need to take calcium always balance it in a magnesium/calcium supplement.

Vitamin E has also been shown to be very effective in protecting your arteries by thinning the blood and therefore reducing the risk of heart attack. Also of major benefit in this regards are the Omega 3 fish oils (EPA/DHA). These help to thin the blood and reduce inflammation in the arteries as well as lowering triglycerides (fats in the blood).

Other nutrients which are important are antioxidants, including Vitamin C and Co-enzyme Q10 and the amino acid lysine. Vitamin C helps to stop arterial tissue from hardening, reduces inflammation and helps repair and lysine is thought to act as a kind of arterial Teflon, preventing a build-up of deposits in the arteries. Q10 is a potent antioxidant and proven to help hypertension and heart disease.

There are some studies being done which would seem to indicate that large quantities of Vitamin C (10 gm+) can completely reverse atherosclerosis. Unfortunately, this avenue is not being pursued as vigorously as it might as there is little money to be made from Vitamin C!!

A diet high in fibre has also been shown to have an effect on blood pressure, so bear this in mind as you plan your meals! Good ways of getting extra bulk into the diet is to increase fruit and vegetable intake with each meal (this does not include potatoes!) and consider making yourself a healthy smoothie daily as this will not only boost important nutrient levels but also fibre levels. Increase your intake of whole foods rather than processed or canned foods or use a wholefood supplement. A bulking agent such as Psyllium husks or a fibre drink or supplement, can also be considered, particularly if constipation is an issue (but drink plenty of water).

Garlic is an effective remedy which helps to stimulate blood flow and relieve high blood pressure, but ensure it contains the active ingredient allicin (many supplements don't). Alternately, use plenty of garlic in cooking, and therapeutic juices.

Another easy remedy worth considering is beetroot juice. This has been shown in studies to increase significantly levels of nitric oxide which helps improve blood pressure, and is as effective as, if not more so, than medication.

Some of the 'healthy' mushrooms such as maitake, shiitake, or reishi have also been shown to help with blood pressure and an adequate supply of B vitamins is also important in maintaining healthy circulation and blood pressure. As these are water soluble we need adequate intake of these daily as there are no body reserves. Consider taking a good B complex daily.

Other useful herbs are cayenne, chamomile, fennel, hawthorn berries, parley and rosemary which all can be beneficial for blood pressure issues.

Water

This one is quite simple to put right, and quite a wide-spread cause of blood pressure problems. It is an adaptive process caused by a gross body water deficiency. Dehydration is extremely common in our society and any thirst reflex is often treated with tea, coffee or sugary drinks, which does nothing to improve the problem.

As the body's total fluid volume decreases, the 'fluidity' and volume of blood decreases (blood is 92% water). As a result the body has to decrease the aperture of its main vessels otherwise there would not be enough fluid to fill the vessels. Another potential outcome is that some of the capillary beds or vascular beds will be closed down in order to maintain function to the vital organs and systems, leading to gradual damage from long term dehydration.

There is a general medical protocol that excess salt (sodium) is a problem with high blood pressure, and the recommendation is to cut back on this. But sodium is a vital electrolyte in the body and an essential part of the water regulation system. If we do not drink enough water, the body will hold on to salt in the body in order to try to retain as much water as possible. By giving diuretics, which is one of the standard treatments, matters are made much worse, and salt concentrations rise in order to try and hang on to more water.....madness really!

Remember also, that the thirst reflex is not a good indication of whether water is required. This is a mechanism that tends to kick in only with chronic dehydration, and is a declining reflex anyway as we get older – the older you are the less likely you are to feel thirsty unless it is very acute!

The Problem with Diuretics

In light of the information above, you might think it is counter-intuitive to take diuretics if you have a problem with high blood pressure. And yet these are one of the more common medical approaches to this issue.

Diuretics demand water from every cell they meet. This reduces the amount of fluid in the blood vessels, but also affects the water level everywhere else in the body as well – even the brain may be forced to give up some of its water which it would normally only do in the direst of emergencies. This can cause you to feel drowsy and dizzy and affect other brain functions (the older you are the more likely this is to happen).

Also diuretics combined with even a moderate intake of alcohol – which itself has a dehydrating effect on the body – can lead to confusion and in those badly effected can result in forgetting to drink enough water or eat properly. Tranquillisers can also have a similar effect. Some endocrinologists now believe that dehydration caused by diuretics to be a significant cause of death in the elderly.

These so called 'side effects' are in fact just the normal effects of taking a diuretic. They work by latching onto sodium ions in the body, causing the body to excrete excess salt. As water always follows salt in the body (1 molecule of sodium is followed by 21 molecules of water) this has the effect of excreting water as well – whether it is needed or not! The diuretic does not know whether it is taking too much salt – and therefore water – from a part of the body where the water is needed, it is only carrying out its job.

Another problem with diuretics is that they often cause potassium stores in the body to be depleted which can lead to weakness, fatigue and cramps. Other trace elements within the body can also be affected. This in turn can lead to other complications in the body – for example digitalis – a drug commonly given to heart patients – becomes toxic if the body is low in potassium. In addition, one of the causal factors of high blood pressure is now thought to be a deficiency of potassium, so you can see what a catch 22 we have here.

Is there an alternative?

As outlined above there is a growing body of thought which believes that high blood pressure is, in fact, a result of a gross deficiency of water! As the body's total fluid volume is decreased by dehydration due to lack of water intake, and high amounts of diuretic drinks such as tea and coffee, the main blood vessels in the body have to decrease their aperture and some capillary beds close down otherwise there would not be enough fluid left in the body to fill allocated blood space. If this did not happen blood gases would separate out and fill the 'empty' space leading to 'gas locks', which could be dangerous.

By increasing the amount of water you drink* you can improve the levels of fluid in the body, and once the body has had a chance to re-balance itself it is not unusual for blood pressure to revert to normal.

Simple, straight forward, and no side effects. So why not try it?

Other Considerations

Dr Samuel J Mann, associate professor of clinical medicine at the Hypertension Centre of the New York Presbyterian Hospital, drawing on his experience with thousands of patients, maintains that there is a link between hypertension and emotions. More specifically old, unhealed repressed emotions and trauma. It is our hidden emotions, he says, the emotions we don't feel (ie repress), that lead to hypertension and many other unexplained physical disorders. It is therefore necessary, in order to deal with hypertension, especially severe hypertension, to bring these hidden emotions into the light, into consciousness, and deal with them.

We have a choice basically to deal with our demons, however painful that might be, and confront the source of the problem, or choose to opt for standard medical treatment to control the condition, as best it can.

Flower essences, which work very gently at helping us to release or otherwise deal with old, stuck emotions, would be very useful to use here. Using the Australian Bush Flower range a combination of Bluebell, Crowea, Five Corner, Hibbertia, Little Flannel Flower, Mountain Devil and Mulla Mulla can be used to address high blood pressure, although a combination tailor-made to your particular case is even more beneficial.

And don't forget the part that exercise can play. This works by opening up the capillary beds in the muscles –the more muscles are exercised the more their capillaries will open and hold a greater volume

of blood within the circulating reserves. A closed capillary bed presents resistance to the blood circulation, causing pressure to go up as a result.

High blood pressure, like so many other 'problems' in the body, is a message from your body telling you that some of the vital balances are out. Look to discover what this might be, and put it right before you start down the road of using potentially damaging drugs. Speak to me if you want any help with sourcing good products or help.

*ideally you should drink a minimum of 4 pints (2 l) of water a day