



Hypertension

High Blood Pressure (hypertension) - a condition present when blood flows through the blood vessels with a force greater than normal - can strain the heart, damage blood vessels and the kidneys.

Hypertension usually does not cause symptoms initially, but sustained hypertension over time is a major risk factor for hypertensive heart disease, coronary artery disease, stroke, aortic aneurysm, peripheral heart disease, peripheral artery disease and chronic kidney disease, and even dementia.

Hypertension is classified as either primary hypertension or secondary hypertension. About 90–95% of cases are categorized as primary hypertension, defined as high blood pressure with no obvious underlying cause (often dietary). The remaining 5–10% of cases are categorized as secondary hypertension, defined as hypertension due to an identifiable cause, such as chronic kidney disease, narrowing of the aorta or kidney arteries, or an endocrine disorder such as excess aldosterone, cortisol, or the catecholamine's (adrenaline, noradrenaline, and dopamine).

What is high blood pressure?

Your heart pumps blood around your body to deliver energy and oxygen. A certain amount of pressure in your blood vessels is needed to do this. Blood pressure (BP) is measured in millimetres of mercury (mmHg) and is recorded as two figures:

- **Systolic pressure** – the pressure of the blood when your heart beats to pump blood out.
- **Diastolic pressure** – the pressure of the blood when your heart rests in between beats, which reflects how strongly your arteries are resisting blood flow. It is more of a concern when the diastolic is much higher than it should be. The readings are shown as a ratio between systolic and diastolic pressures.

A normal BP is 120 (systolic) / 80 (diastolic), although these can vary from 110/70 – 140/90. The physician will generally take three separate reading over several days because it is difficult to make an accurate diagnosis with just one reading.

- **Normal blood pressure is 120/80, but can vary from 110/70 – 140/90.**
- **Borderline hypertension reads 140/90 – 160/90.**
- **Any blood pressure over 180/115 is severely elated.**

Anti – Hypertensive Diet

The DASH diet (Dietary Approaches to Stop Hypertension) was developed to combat hypertension. The diet is simple:

- Eat more fruits, vegetables, and low-fat dairy foods
- Cut back on foods that are high in saturated fat, cholesterol, and trans fats.
- Eat more whole-grain foods, fish, poultry, and nuts
- Limit sodium, sweets, sugary drinks, and red meats

Whilst this is sound dietary advice, I believe it needs to be updated to:

- Avoid sodium, sweets, sugary drinks & foods, red meats, and to reduce dairy foods - **not to eat more**

The main factor is having a low salt diet, whatever the reason for your hypertension - therefore eliminate all added salt from your diet. We can manage on as little as 2g of salt daily that we can get naturally from fresh, natural foods without adding any. So, read the label and avoid any foods with the following foods and additives:

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| • Soda, Sodium with the symbol Na | • Baking soda | • Foods with mould inhibitors, preservatives, and most sugar substitutes |
| • MSG – Monosodium glutamate | • Canned vegetables / pulses etc. | • Meat tenderizers |
| • Diet soft drinks | • Soy sauce etc. | • Softened water |
| • Commercially prepared foods | • Salted crisps / nuts etc. | |
| • Salted and processed meats | | |

Salt - The Benefits of Eating Less:

- You will notice a wider range of flavours in food, as your taste buds adjust to having less salt.
- If you cut back on heavily salted items, you could end up eating a more nutritious diet because sodium often lurks in foods that are high in calories, fat and sugar.
- Cutting down on salt reduces BP in weeks, whether or not your BP is high to start with.
- When your BP goes down, your risk of developing heart disease and stroke goes down too, whatever your age.

How to Reduce Salt in your Diet:

- Avoid red traffic light salt rated foods. **Red (High)**, **Amber (Medium)**, or **Green (Low)**.
- Foods like breads and cereals may not taste salty, but can be packed with sodium.
- Labels promising "reduced sodium" or "unsalted" may still contain more than you need.
- Salt can be listed by other names, such as baking soda, baking powder, disodium phosphate, or any compound with sodium or Na in its name, so check food labels.
- If you take any prescriptive medications check if they contain any sodium.
- Instead of seasoning with salt, try pepper, herbs, spices, lemon, vinegars, garlic, onion etc.
- If you must have salt, add it after cooking since the stronger taste will help you use less.
- We learn to crave salt, but we can learn to prefer less in just a few months.

The Fibre Connection: Research shows that high-fibre foods help to lower your BP, although little is known about how this takes place. The following mechanisms are believed to be involved: Dietary fibre reduces the glycaemic index of foods, thereby attenuating insulin response. Dietary fibre has been shown to enhance insulin sensitivity and improve vascular endothelial function. Furthermore, there is evidence that fibre, especially soluble types, improves mineral absorption in the gastrointestinal system, which may have an indirect favourable effect on BP. Choose **wholegrains, pulses, fruits and vegetables**.

Other Dietary Considerations:

- Follow my updated DASH diet principles.
- **Potassium** - can lessen the adverse effect of sodium on blood pressure. Sources include: **sweet potatoes, squash, green leafy vegetables (GLV), bananas, melons and pulses**.
- **Calcium** - can also help to lower BP, as it is needed by your heart, muscles and nerves to function properly. Sources include: **dairy**, but more importantly **GLV** as they give better levels of calcium than dairy foods that is more bioavailable! Yes you read it right! Choose low oxalate (to prevent nutrient absorption) types such as **romaine lettuce, arugula, kale, turnip greens, chard, and bok choy etc.**
- **Beetroot** - researchers found that patients with high BP saw significant improvements in BP in just 24 hours from drinking beetroot juice, because it contained high levels of the BP lowering nitrates.
- The following juices are also beneficial: carrot, celery, cranberry, citrus fruit, parsley, spinach, and watermelon.

Lifestyle Considerations:

- Reduce excessive weight and maintain within normal limits.
- Take regular moderate exercise – at least 3 x 30 minutes.
- Stop smoking – this damages - leading to cholesterol deposits and narrows blood vessels.
- Do not over exert yourself in hot or humid weather.
- Avoid excessive exercise and emotional stress.
- Do not take phenylalanine (found in NutraSweet or L-Tyrosine)

Please Note: This handout should only be used as a guide to help inform you as to the foods that **may** help to deal with hypertension. It **should not** be used as definitive guide to hypertension. If you think you may have hypertension then please contact your medical doctor.