

Hypertension and Atherosclerosis – Fact Sheet

Hypertension also referred to as high blood pressure has been associated with risk factors such as: smoking, diet, genetics, age, obesity, stress and heavy metal exposure. High blood pressure that is persistent is dangerous and can manifest into other serious conditions with atherosclerosis, elevated LDLs and triglycerides being the most common. Kidney damage, heart failure and stroke can also be associated. Hypertension is often asymptomatic but can present with headaches, dizziness, tinnitus and fainting.

Atherosclerosis on the other hand is the build-up of fatty deposits within the artery walls forming lesions or plaques which effectively narrow and damage the artery. If this is not managed it can develop into angina followed by myocardial infarction if plaque breaks off and becomes lodged obstructing blood flow. Hypertension is the most common risk factor, however; factors such as dyslipidaemia, diabetes mellitus, genetics, obesity, diet, smoking, stress, homocysteine and C-reactive protein levels can all contribute to the development.

Heart Healthy Recommendations

- **Fresh vegetables and fruit** – preferably seasonal produce will provide an abundance of antioxidants while boosting the immune system, reducing blood pressure and is essential for long term cardiovascular health.
- **Wholegrains and legumes** – high in fibre.
- **Fresh fish** – that is low in mercury such as; mackerel, wild salmon and sardines.
- **Healthy fats** – (particularly omega-3's) can reduce LDL levels and triglyceride levels.
- **Potassium** – increase intake through vegetarian sources to promote the urinary excretion of sodium which will also lower blood pressure.
- **Garlic and onions** – are high in antioxidants and rich in thiosulfinates and sulfur compounds, which have cholesterol-lowering properties and can play an active role in the management of hypertension.

The following foods need to be reduced/eliminated from an everyday diet to maintain a healthy heart:

- **Animal products** – (meat and dairy in particular) to reduce blood pressure, cholesterol levels and systemic inflammation.
- **Processed foods** – as they weaken the immune system, elevate blood pressure and cholesterol levels, increase vascular inflammation and endothelial dysfunction.
- **Caffeine** – as it can exert hypertensive effects, increase homocysteine levels and serum LDL cholesterol.
- **Alcohol** – as it too can impair immune system function and increase blood pressure.

Other Suggestions

- Quit smoking.
- Engage in moderate exercise as it is essential for the management and prevention of cardiovascular diseases.
- Take control of your stress. Stress has been linked to high blood pressure.

Customised nutritional plans comprising of a specific food plan with the support of nutrient/herbal supplements can be very effective in lowering blood pressure, cholesterol and systemic inflammation. If you require support please visit www.good4younutrition.com.au