

Blood Pressure and Effects of Exercise

What exactly is blood pressure?

Basically, blood pressure looks at the force of blood being pumped against the artery walls by the heart. It indicates how hard the heart is working to maintain efficient blood flow through the body's circulatory system.

When a reading is given, there are always 2 numbers displayed – e.g. 120 / 80 mmHg.

The high number indicates the **"Systolic"** pressure. This is simply the pressure of the blood being forced through the arteries when the heart contracts or 'pumps'.

The low number is known as the **"Diastolic"** pressure. This is the minimum pressure of the blood against the artery walls when the heart relaxes ... or between beats. As a general rule, a high Diastolic pressure is the more critical of the two

A normal Blood pressure reading is about 120 / 80 mmHg – the values usually range from 100-140 / 60-90 mmHg.

High Blood Pressure or 'Hypertension'

A high blood pressure would be a reading above these limits – that is, 140 / 90mmHg or more is starting to become **"Hypertensive"**. As the heart is forced to pump against increased resistance, it must work harder – so in time, the heart becomes weakened.

'Hypertension' over recent years has affected approx. 17% of males & 13% of females in Australia.

Men are usually more susceptible, however this seems to even out when women reach menopause. Prolonged hypertension is the most significant factor in cardiovascular disease, being the major cause of heart failure & stroke.

How exercise affects blood pressure:

Hypertension can be controlled a number of ways ... medication, diet & *exercise* are the primary forms of reducing high blood pressure.

Regular cardiovascular exercise (3x / week for 20-30 min duration), such as walking, swimming, cycling, etc. has been shown to lower blood pressure significantly (as well as increase levels of 'friendly' HDL cholesterol).

Regular exercise will result in a number of changes. Some in particular include:

- A lower resting heart rate ('pulse')
- Improved strength of the heart 'muscle', which leads to a larger amount of blood being pumped out with each beat (more efficient).
- Fatty deposits in the blood vessels are cleared out (less restriction)
- Reduced stress levels
- Reduced body weight

These points above lead to an improved efficiency of the heart – it can now work against less resistance, with better blood flow & output. Stress & obesity are also major factors in hypertension – so improvement here will reduce blood pressure effectively.

Thus it is evident that cardiovascular exercise is a major factor in reducing blood pressure or preventing elevated levels. This is not to say however, that exercise alone will treat hypertension - diet & medication are extremely important. Your local GP will advise on what form of treatment is required, depending on the severity of hypertension.

Next time you're seeing the Doctor or Trainer, ask for your blood pressure & what your Systolic & Diastolic readings are !

Most of all, keep exercising regularly to improve your quality & duration of life !