# WELL

## **Hearty facts**

If you are healthy, your heart and blood vessels work together in a balanced manner to deliver blood to every tissue and organ in your body - keeping you alive and well.

#### Did you know?

- Your body has its very own pump system that involves around 100,000 kilometers of blood vessels.
- •Your heart can beat over 100,000 times every day!
- Adults have an average of 4.7 to 5.0 litres of blood in their body.
- •Normal, healthy blood pressure is around 120/80.
- •The World Health Organisation has estimated that one in every eight deaths world-wide is linked to unhealthy blood pressure.

#### Blood pressure

Blood pressure is the force blood exerts on the inside walls of blood vessels as it travels through the body. Blood pressure is largely controlled by the size of the blood vessels: the wider the blood vessels, the lower the pressure. As blood vessel size reduces, the pressure increases. Imagine a garden hose; if the hose is a wide one, the pressure inside as the water rushes through will be less than if it was a much thinner hose. Unlike a garden hose, however, our blood vessels can change size to a certain extent. For example, if your blood vessels contract and become narrower then this will increase your blood pressure. Likewise, if there is a build up of cholesterol plaque or fatty deposits in your blood vessels, this will narrow the diameter of your blood vessels and increase your blood pressure. Continuous high blood pressure can damage your heart, kidney, eyes and blood vessels in the brain, so it is important to ensure that your blood pressure is maintained within healthy limits.

# What can you do to avoid an unhealthy rise in blood pressure?

There are a number of things you can do to influence your blood pressure and keep it within normal, healthy limits. At this clinic we have many treatments that can address the underlying factors of unhealthy blood pressure. Here are some examples of what we have to offer that may help to keep your heart and circulatory system in top shape:

• Improving dietary choices. We can help you plan meals to assist your cardiovascular system.

- Fat loss programs such as the KetoSystem.
- Healthy blood glucose management.
- Cholesterol maintenance programs.

#### Can't take the pressure?

To specifically help with blood pressure, you may benefit from a few key nutrients that are well researched for their effects on improving cardiovascular health:

- Magnesium: Magnesium is necessary for the health of your muscles and nervous system. Did you know that your blood vessels are actually made up of tiny muscle cells? Magnesium helps these muscle cells relax – the more relaxed they are, the lower your blood pressure will be! The type of magnesium supplement you choose is very important, as some forms of magnesium may upset your digestive system. In this clinic we only use a high quality form of magnesium called magnesium diglycinate. This form of magnesium is very well tolerated and well
- Taurine: Taurine is another nutrient that may be able to help you maintain healthy blood pressure. It works together with magnesium to support the health of the heart and cardiovascular system. It also seems to have a positive effect on the nervous system, and may be able to assist if your blood pressure goes up when you are stressed.
- Fish oil: Essential fatty acids from fish oil can help to improve circulation and may assist in maintaining healthy cholesterol levels. You can get the therapeutic benefits of fish oils by taking a medical strength fish oil supplement that contains high levels (around 50%) of Eicosapentaenoic acid (EPA) and Docosahexaenoic acid (DHA). It is also important to ensure your fish oil supplement is free from heavy metals and other contaminants so that you get all the benefits without the worry.
- Arginine, Folate, B12, B6, Trimethylglycine: The combination of these nutrients can assist your body produce nitric oxide. Nitric oxide helps to maintain healthy blood pressure. These nutrients also help to prevent your body producing high levels of a substance called homocysteine. A build up of homocysteine has been linked to an increased risk of cardiovascular disease.
- Bonito Peptides: Bonito Peptides are small protein molecules derived from fish traditionally eaten in Japan. They work by helping to reduce your body's production of a angiotensin II; angiotensin II is a chemical that can cause constriction of the blood vessels. By helping to inhibit the production of angiotensin II, Bonito Peptides can help you maintain normal healthy blood pressure.

### Before you boil over...

