



# Healing Heart Disease

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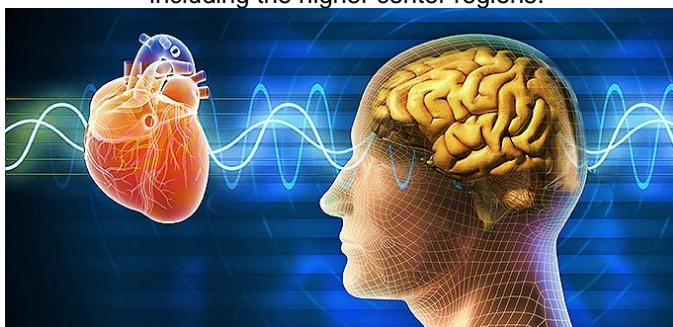
Cardiovascular disease is a major health problem and a leading cause of death in Australia. Coronary artery disease is the most common cardiovascular condition, and it is caused by blockages in the blood vessels (atherosclerosis) supplying the heart muscle. This in turn leads to heart attacks and angina. Stroke comes a very close second as the commonest cause of death. It is characterized by a disturbance in the blood supply to the brain due to a blocked or ruptured artery.

The major risk factors for cardiovascular disease include:

- Smoking,
- High cholesterol and other blood fats such as triglycerides,
- High blood pressure,
- Being overweight,
- Having high blood sugars or diabetes,
- Unhealthy diet,
- Not getting enough exercise,
- Drinking too much alcohol, and
- Psychosocial factors such as stress, mental illness, isolation and addiction,

One of the most amazing things I have ever learnt about in the field of Medicine is that the heart has its own mini-brain (called the intracardiac nervous system). For many years it has been known that emotions, such as love or fear, for example, leads to changes to our heart rate, blood pressure and breathing for example. It was thought this was just due to the nervous system responding in concert with the brain. However, research in the last 30 years have found that heart has its own functional little brain. It has the following features:

- It contains several types of neurons (nerve cells), neurotransmitters, supporting cells and proteins similar to those found in our brain up top,
- It operates and processes information independently of our great brain or the rest of the nervous system,
- It has its own logic and thoughts, and
- It can send messages to our head brain including the higher center regions.



The head brain understands our heart brain so definitively that it can obey those messages from the heart, influence the perceptions, mental clarity, creativity, decision making and many other cognitive processes. The greater the coherence in the heart rhythm patterns, the more positive the effects.

How does it communicate? The heart's brain has the most powerful and extensive electromagnetic field in the entire body – with the magnetic component being 500 times stronger than the head brain. The electromagnetic field is so strong it can be detected a couple of meters away. It is through this means that the heart can communicate with the brain and indeed the rest of the body as well.

How amazing is this. Although I think I have always known that there was something very special about the heart as all good literature has known long before Science caught up. On that note, it gives a whole new meaning to verses from the greatest piece of literature – the Bible. Psalm 51: 10 - *Create in me a clean heart, O God, And renew a steadfast spirit within me.* If you embark on a journey to clean up the health of your heart, adopt this verse and ask God for a clean heart which will renew a right spirit within you. Solomon, the wisest man that has ever lived, penned these words which also have such a deeper meaning now that we understand the amazing complexity of the heart. Proverbs 4: 23 *Above all else, guard your heart, for it is the wellspring of life.* So how important is it to value and look after your heart now that you now know all this.

There are a number of choices we can make with our lifestyle to help prevent the development of cardiovascular disease, and its progression.



Smoking is the single largest cause of poor health and death. It causes more than 20 000 deaths each year in Australia and more than 5 million deaths worldwide. Smoking cigarettes exposes you to about 70 toxic carcinogens that

leads to more than 40 types of cancer. Furthermore, nicotine can destabilise the heart rhythm, so if you do have a heart attack and you are a smoker, you are more likely to from a fatal heart rhythm complication. The carbon monoxide exposure from smoking causes damage to lining of your arteries making it easier for blockages to build up and forming the atherosclerosis that leads to heart attacks and strokes. The benefits to quitting are immense and this is what happens:

- Almost immediately you improve your heart rate and blood pressure
- Within a day, the levels of poisonous carbon monoxide in the blood drop to normal
- Over the next few months, you improve the circulation throughout the body, and your lung function increases

- Over the next several months, the lungs continue to heal, and the coughing and shortness of breath really decreases
- At one year your risk of heart disease is half that of someone still smoking
- At five years your risk of a variety of cancers (mouth, oesophagus, throat, bladder) is halved and your risk of stroke is that of a non-smoker
- At ten years your risk of lung cancer is half that of a smoker
- At fifteen years, your risk of coronary artery disease is that of a non-smoker.

The Message? It's never too late to stop smoking.

A whole food, plant-based diet is the best diet to improve your cardiovascular risk factors. Diabetes is one the many risk factors that this diet addresses. The lacto-ovo vegetarian diet (vegetarians that still eat eggs and dairy) reduce their risk of developing diabetes by 60%. However, going to a completely plant-based vegan diet with no animal products, leads to an almost 80% drop in the risk of developing diabetes. Then there's the positive effects on blood pressure. The more plant-based your diet, the greater the drop in your blood pressure. Vegans, on average, have lower blood pressures than lacto-ovo vegetarians, and meat eaters have



the highest rates of elevated blood pressure and use of blood pressure medications. The cholesterol and bad blood fats, that increase the risk of cardiovascular disease, also respond positively to a plant-based diet. On average a lacto-ovo vegetarian will have a cholesterol level almost 20% lower than a meat eater, but in a vegan, with a complete plant-based diet, the cholesterol will be more than 40% lower. We know that a whole food plant-based diet is usually rich in fibre and this has been shown to reduce cholesterol as effectively as the statin cholesterol medications. Furthermore, the greater the proportion of plant-based foods consumed, the more likely you are to have a healthy body weight. Again, this will reduce your risk of cardiovascular disease.

Caffeine has some adverse effects on the cardiovascular system, made worse, the more you have. It can raise your blood pressure and cause palpitations and extra heart beats. It makes the blood vessels narrower and stiffer in both the body and the brain, and it is also linked to higher levels of cholesterol. Staying off caffeine will improve your blood pressure, cholesterol and heart attack risk.

The cardiovascular system is also affected negatively by alcohol. Immediately, at the time of drinking, both the heart rate and blood pressure will increase. In the long term, this can lead to ongoing high blood pressure, increased heart rate and even a weakening of the heart muscle and irregular rhythms. Alcohol can also raise your levels of bad fats in the

blood, particularly triglycerides. By taking the alcohol out of the diet, you will have further cardiovascular benefits by reducing your stroke and heart attack risk.

There are some particular foods that may provide some cardiovascular benefits. The Allium family – in particular onions and garlic – have been shown to help:



- prevent atherosclerosis,
- reduce the blood fat levels overall,
- lower blood pressure, and
- helps to thin the blood to keep it moving freely.

Nuts, such as almonds, macadamias and Brazil nuts

improve the blood fats and cholesterol. Globe artichoke has also showed some promising results in reducing bad LDL cholesterol and the triglycerides. The bergamot orange activates a master metabolic switch and breaks down sugars and fats, improves the microcirculation, enhances blood fat profiles, provides protection against fatty liver, and blocks cholesterol absorption in the gut. We all know the little rhyme “Baked Beans are Good for the Heart” and there is really good science to back up the benefits of legumes of all kinds.



Black beans, butter beans, cannellini beans, chick peas, kidney beans, peas, soy beans, and red lentils are some examples. They are full of protein, fibre, folate, potassium, zinc, iron, and a whole host of anti-oxidants, whilst being naturally low in fat, salt and they have no cholesterol. For those who are time poor, these nutritious benefits are still present in the tinned versions of these beans. Legumes can be added to so many dishes – soups, stews, pasta sauces, salads, or even make a dip from them. The benefits include:

- As good as or better than cutting calories for losing weight,
- Improves the health of the gut,
- Lowers the blood pressure,
- Regulates sugar and insulin levels,
- Decreases the levels of bad fats, and
- Reduces the risk of heart disease, stroke, diabetes, cancer and depression.

Magnesium is a mineral that is front and center in cardiovascular health, and is deeply involved in blood pressure, blood fat and blood sugar regulation. Some great food sources include leafy greens, legumes, and wholegrains.

Omega 3 fatty acids have multiple benefits on the cardiovascular system. It decreases blood pressure, lowers the blood fats, keeps the blood thin, and reduces the risk of developing heart arrhythmias or abnormal heart rhythms. Healthy plant sources include flax or linseed, walnuts and chia seeds.

Stress and mental illness have quite a complex relationship with cardiovascular disease. Long-term stress leads to high levels of cortisol in the blood which can, in turn, increase your cholesterol, blood pressure and blood sugar.



Moreover, both depression and anxiety increase the risk of cardiac death and heart attacks. Stress and mental illness lead to unhealthy lifestyle habits, but on the other hand they can be successfully helped with lifestyle measures. Some of



the helpful things to manage stress and mental illness include:

- Exercise,
- Expressive and creative activities,
- Spiritual and religious activities,
- Volunteering for meaningful causes,
- Spending time in nature,
- Massage, and
- Developing strong social supports – spending time with good friends and close family.

Exercise is one of the key factors in both the prevention and management of cardiovascular disease. The benefits include:

- Improving your blood fats,
- Reducing your blood pressure,
- Improving your blood sugars,
- Improving your blood flow through your heart muscle, and
- Helping to prevent blood clots and abnormal heart rhythms.



Overall, exercise reduces your risk of cardiovascular by disease 30%. It can be as good as medication in preventing coronary artery disease and prediabetes. How much exercise is

enough? Thirty minutes a day, six days per week of moderate exercise. A brisk walk, cycling or swimming are great options. This will decrease your risk of a heart attack by up to 55%.

Most of us would agree that a healthy diet and lifestyle is fantastic at preventing cardiovascular disease. However, could it be reversed, once you have already developed blockages in the blood vessels of the heart? Absolutely! We have marvellous evidence to back this up. Applying the same principles outlined above, researchers have shown this to be very possible. By turning to a whole food plant-based diet, low in fat, regular exercise, stress management, social supports and removing harmful substances such as cigarette smoking and caffeine, patients with angiogram evidence of coronary artery blockages were able to reverse their disease. The effects continued to improve over time as they maintained their healthy lifestyle choices.

There are some herbs that can be of assistance in heart health. Hawthorn Berry has a long tradition as a good heart tonic and it has some properties that help in a number of areas. It can enhance blood flow through the coronary blood vessels and the contraction of the heart muscle, it may protect the heart muscle from damage, help with abnormal heart rhythms, and lower blood pressure and cholesterol. This can interact with heart medications so always check with your cardiologist. The dose is 1-3g each day. Hibiscus tea (made of the dried calyces of the flower) has been shown to be as effective as some of the BP medications, and as a bonus it can even help with weight loss. The dose is 1-3 g each day. Gingko Biloba has some circulatory benefits, helping to improve blood flow in the heart blood vessels and potentially in other blood vessels. It also provides protective benefits in the brain circulation as well. Tablet based extracts of this are used, rather than the whole herb. For dosing, follow the guidance on the product purchased.



## Healthy Heart Prescription

- Ask God for a Clean Heart
- Whole-Food Plant-Based Diet
- Plentiful Garlic, Beans, Greens, Handful of Nuts
- No Caffeine, Smoking or Drinking Alcohol
- Manage Your Stress
- Exercise
- Hibiscus and Hawthorn Berry Tea

