Taking care of your blood-pumping machinery — the heart and cardiovascular system
Like any other ‘machine’, the better you care for your heart, the more likely it is going to go on serving you well. So, in this chapter we are going to look at the ways in which you can best look after your cardiovascular system, at this stage of your life.

Genetics — your cardiac inheritance
There is an old saying in medicine: ‘The best thing you can do for your heart is to choose your parents carefully.’ That means, of course, that if you inherit good cardiac genes from your parents you are likely to have less cardiac problems.

The reality is, of course, that we cannot choose our parents. But we can — and should — choose to take care of the cardiovascular system we have, and which has stoically worked to bring us to this stage of our lives.

As this discussion is aimed at the somewhat older heart owner, I must begin my heart care comments by saying you have done well to get to this point — you are here today after a great many heart beats, and you are reading this chapter in order to
maintain your heart health. So you have a good history, and a good attitude, which is vital. Probably more important than you think.

To return to genetics, there are many genes that affect heart health — too many to cover in this chapter — but two points are important to make:

1. Most cardiovascular disease is environmental in origin. In other words, it is most often your lifestyle rather than your genetic background that leads to your having a heart attack or stroke.

2. There are a few conditions that have a largely genetic influence on CVD risk, and for which your lifestyle will not make much difference. One of these is the genetic cholesterol disorder, familial hypercholesterolaemia (FH), which we shall discuss later in this chapter.

To reiterate, environmental (non-genetic) causes are responsible for the vast majority of cases of heart attack and stroke. One study providing evidence for this is the INTERHEART study, performed by Professor Salim Yusuf and his colleagues of McMaster University, Canada. They selected 46 countries and looked at 14,000 people who had suffered a heart attack and compared them with 16,000 age- and gender-matched people who had not. They measured cardiovascular disease (CVD) risk factors in relation to rates of heart attack, and found there were nine modifiable factors that predicted over 90% of heart attacks. In order of the power of prediction for heart attacks, there were six harmful risk factors:

- Cholesterol levels: they used the ratio of ‘good’ cholesterol (HDL cholesterol) to ‘bad’ cholesterol (LDL cholesterol), measured as apoA-1 and apoB, the major proteins of HDL and LDL. More about ‘good’ and ‘bad’ cholesterol later.
- Current smoking
• Psychological stress (including depression, social isolation, and major disasters such as tsunamis, earthquakes and floods)
• Diabetes
• High blood pressure
• Abdominal obesity.

Three risk factors were protective. In order of predictability, they were:

• Alcohol intake
• Exercise
• Daily consumption of fruit and vegetables.

Alcohol intake — the two-edged sword

Of note in the INTERHEART Study was protection from heart attack from drinking alcohol, consuming fruits and vegetables, and exercising. The role of alcohol in CVD and other diseases is a two-edged sword. On the one hand, there is a negative association between alcohol intake and CVD risk (that is, alcohol is protective in a statistical sense). On the other hand, there is a positive association between alcohol intake and many other diseases such as cancer (that is, alcohol is harmful in a statistical sense). If you look at the overall death rate (perhaps the best indicator of harm or benefit), there is a J-shaped curve of association, with the lowest rate at a consumption of between two and three standard drinks a day (20–30 g of alcohol daily) and higher death rates for non-drinkers (slightly) and heavier drinkers (in proportion to the amount consumed).

NH&MRC guidelines for alcohol intake

The National Health & Medical Research Council of Australia has published the following four guidelines:
1. For healthy men and women, a maximum of two standard drinks a day reduces the lifetime risk of harm from alcohol-related disease and injury.

2. For healthy men and women, a maximum of four standard drinks on a single occasion reduces the risk of harm from alcohol-related injury arising from that occasion.

3. Drinking under the age of 15 years is especially at risk of harm, and not drinking for this age group is especially important.

4. People aged 15–17 years should delay initiation of drinking for as long as possible.

These guidelines are eminently sensible, with a huge body of scientific evidence in support of them.

Back to the INTERHEART Study, and to CVD risk factors. Does the INTERHEART Study mean if you controlled all nine of their risk factors you would prevent over 90% of heart attacks? Not necessarily, because we need to realise that association (in the statistical sense) does not necessarily imply causation. Many of these risk factors ‘co-segregate’ or occur together in the sense that someone who is obese is often also diabetic, has a low level of physical exercise, eats low amounts of fruit and vegetables, and also has high blood pressure. The INTERHEART Study was able to dissect all these factors out statistically and came up with the 12 factors listed above, each of which was independently associated with increased CVD risk.

The important thing to realise is that while CVD risk factors individually increase CVD risk, when they occur together in an individual, they increase risk in a multiplicative way rather than in a simple additive way. It is a very important concept, because having two risk factors is far more dangerous than having one, having three is much more dangerous than having two, and so on. More about assessment of your risk factors later in this chapter.
Genetic influences on CVD risk: Familial hypercholesterolaemia
Inheriting from one parent the gene for high cholesterol causes the condition called familial hypercholesterolaemia (‘familial’ = family-based or inherited; ‘hyper’ = high, referring to cholesterol levels; ‘-aemia’ = relating to the blood), which we will term simply ‘FH’ or ‘genetic high cholesterol’.

People with FH have about twice the usual level of blood cholesterol, with levels of 8–10 mmol/L compared with 4–5 mmol/L for normal people. As a result, cholesterol accumulates in the arteries of people with FH at a much faster rate, and as a consequence to this cholesterol accumulation, a vicious cycle of damage to the lining of the arteries, accumulation of fibrous tissue and calcium, thickening of the artery wall, further cholesterol accumulation and gradual narrowing of the artery’s blood channel ensues over the following decades.

This process (atherosclerosis, known colloquially as ‘hardening of the arteries’) also occurs in the average person living in Western countries (because of environmental and not genetic reasons), but at a much slower rate, and in a much less severe manner.

If untreated, FH people suffer from heart attacks about 10–20 years earlier than normal people, and their life expectancy is also considerably shorter.

There are four clues to the presence of FH in a family:

1. A family history of premature heart attack or CVD on one side of the family (the side affected by the gene for FH). ‘Premature’ refers to age less than 55 years in men and 60 years in woman.

2. The finding of a very high cholesterol level (about twice as high as usual). In the United Kingdom, GPs are advised to think of FH whenever they see a patient with a cholesterol level above 7.5 mmol/L (normal levels are around 5 mmol/L). In that case, they are also advised to check cholesterol levels in all members of the family, including
children of an affected person who has high cholesterol — at any age! This is because the earlier in life steps are taken to lower cholesterol in this condition, the better the outcomes are likely to be (we all know ‘prevention is better than cure’).

3. The presence of premature CVD in a member of the family.

4. The presence of visible cholesterol presence as lumps or bumps in the skin, eyes or tendons. These indicate very high cholesterol levels, especially when seen in young adults, and may not be seen in all people with FH.
   - Xanthelasmas are flat yellow lesions on the surface of the eyelids, usually near to the eye. These also occur in people with normal cholesterol levels and are therefore not specific for FH.
   - Arcus senilis refers to an arc-shaped opacity that develops in the outer rim of the cornea (which is usually transparent), and is often difficult to see in the early stages without the aid of a magnifying glass or slit lamp (as used by optometrists). In the late stages it is readily seen as a white ring on the outer rim of the cornea. Arcus senilis occurs normally with ageing, but is abnormal if present under the age of 45 years, when it indicates FH and genetic high cholesterol.
   - Tendon xanthomas. These are firm, painless bumps in the tendons, due to cholesterol accumulation and accompanying fibrosis. They are usually found at the back of the knuckles, and sometimes at the back of the heels in the Achilles tendons.
   - Skin xanthomas. These are firm, yellowish painless bumps in the skin, due to cholesterol accumulation and accompanying fibrosis.
How is FH treated?
Essentially, people with FH need to be treated as early in life as possible with medications to lower their cholesterol levels, and to continue this life-long. ‘Statins’ are the usual medications, which have been shown to reverse the process of atherosclerosis and to reduce the risk of CVD. Avoiding cigarette smoking is also an important strategy. Diet has some role to play but is not the key element to successful control of cholesterol levels — treatment with a statin is.

Children with FH are safely started on a cholesterol-lowering diet from the age of two years, and can be treated with a statin from the age of ten years (especially if they have either a family history of very early CVD in their thirties or forties, and/or the child has very high cholesterol).

FH is one of the commonest single-gene metabolic disorder known to man, with the latest research showing it occurs in one person in 300 of the population. In spite of this, FH is often poorly recognised by GPs, and there is little awareness of the condition by the general public and politicians, who have failed to fund a national program in Australia for FH detection and treatment as exists in Scandinavia and the Netherlands, where almost all cases of FH have been detected and genetic testing is routinely used for diagnosis.

To find out more about FH, go to the website of my FH research study (the Barossa Family Heart Study), at www.barossaheart.com.

Cardiovascular risk assessment — finding out what’s going on.
The best favour you can do for your heart is to assess your chances of having a heart attack or stroke in the next five years, using the Cardiovascular Risk Assessment Tool of the Australian NVDPA (National Vascular Disease Prevention Alliance).
This was designed specifically for Australians, and is based on the famous Framingham Study, which was the first study to use the term ‘risk factors’.

It’s quite simple, but does require measurement of your total cholesterol, ‘good’ cholesterol (HDL cholesterol), and blood pressure, so you need to make a visit to your family doctor to get this done. You enter into the assessment tool the following seven parameters:

- Age
- Gender
- Whether you are diabetic or not
- Whether you are a cigarette smoker or not
- Systolic blood pressure (the higher of the two blood pressure measurements taken by an automatic machine)
- Cholesterol (this refers to total cholesterol and not to ‘bad’ cholesterol or LDL cholesterol)
- HDL cholesterol.

Heart disease statistics around the world

About 20% of the adult Australian population has more than two major CVD risk factors as entered into the NVDPA calculator. No wonder, then, that Australia still has a high rate of heart attack and stroke compared with Asian countries, even though this has fallen by over 50% since the 1960s, and Australia is ranked well by comparison with many European nations.

The World Health Organization (WHO) has a ‘league table’ in its CVD Atlas, which shows that Australia is among the world’s leaders in reducing heart attack deaths.

According to the WHO, heart attack or coronary heart disease (CHD) is now the leading cause of death in the world: ‘It is on the rise and has become a true pandemic that respects no borders’. In those aged 15–59 years, HIV/AIDS causes more annual deaths than
CHD (2,270,000 versus 1,332,000 respectively). Other causes of death in this younger age group are: tuberculosis 1,036,000; road traffic accidents 814,000; stroke 783,000; self-inflicted injuries 672,000, and violence 473,000. In those aged 60 or more, CHD causes 5,825,000 deaths compared with 4,689,000 for stroke (both of these are smoking related), 2,399,000 for chronic lung disease (mostly related to smoking), 1,396,000 for lung infections, 928,000 for lung cancer, 754,000 for diabetes, and 735,000 for high blood pressure–related heart disease. You can see that in the older population, CVD accounts for over ten million deaths annually!

Back to working out your CVD risk. After entering your risk numbers into the computer, it calculates your estimated risk of having CVD in the next five years. It’s important to state this is not a guaranteed, set-in-stone number, but gives you some idea where you stand on the risk scale.

The NVDPA has set the following risk levels as a guide to what should be done next:

- Low risk: less than 10% in the next five years
- Intermediate risk: 10–20% in the next five years
- High risk: over 20% in the next five years.

**Low CVD risk**
Those at low risk can continue to observe a healthy lifestyle — not smoking, avoiding sugary, high saturated fat and cholesterol containing foods (more about that later), maintaining healthy exercise levels, and keeping your weight down.

**Intermediate CVD risk**
Those at intermediate risk need to look more closely into what they are doing, and what needs to be done to correct the situation.

In my experience, most people at intermediate risk are middle-aged, overweight and under-exercised men who have busy
jobs, heavy family responsibilities, and are ‘under the hammer’ with stressful lifestyles. Most of them (these days) have given up smoking — but that, they always remind you, didn’t help their weight problem! They want to shift the blame for this onto an external factor, rather than accepting it’s their three glasses of wine a night and often two at lunch, their constant overeating high-fat, sugary foods and under-exercising that are to blame.

My way of dealing with these people is to explain what ‘intermediate risk’ actually means. Some people like a mathematical, scientific, statistical interpretation, while others prefer descriptive, ‘word imagery’ to put the concept across. Others prefer to think in terms of betting on a horse race — if you had a one in five chance of winning, wouldn’t you back the horse? In the case of intermediate risk, it’s actually between a one-in-ten and one-in-five chance of losing — maybe your life, but definitely losing your continuing good health!

These days, imaging of the arteries leading from the heart is often performed in people at intermediate CVD risk, in order to make the estimate more precise. The most useful technique measures coronary artery calcium (CAC). You may recall from our discussion of cholesterol accumulation in arteries that calcium also accumulates during the process of atherosclerosis. In the later stages of the disease process, calcium occupies about 20% of the volume of an atherosclerotic lesion (called an atherosclerotic plaque, not to be confused with dental plaques).

Measuring CAC give an estimate of biological age or arterial age, rather than age as measured from the birth date. Some 40-year-olds with genetic high cholesterol have arteries of an 80-year-old, because they have accumulated so much calcium and cholesterol. Other 80-year-olds have the arteries of a normal 40-year-old, because their arteries have not accumulated calcium and cholesterol, for whatever reason.

So, a person’s estimated risk according to the NVDPA calculator can be modified by the results of the CAC and changed into
either high risk (over 30% in the next five years), low risk (less than 10% risk) or stay the same intermediate level of risk. People whose risk estimate has changed have been reclassified with regard to risk level as a result of their CAC score. This is one of the most useful aspects of the technique, as it often alters a patient’s management by his or her doctor. For example, a person with a high CAC should receive a statin and probably also aspirin to lower his or her risk of developing CVD in the future.

Calcium in the ‘widow’s artery’ — the beginning of the left anterior descending coronary artery — is a particularly dangerous place to have CAC, as it is the most common site for CAC in people having heart attacks.

Currently, CAC is still (paradoxically) not reimbursed by Medicare in Australia, in spite of very strong scientific evidence that it is a cost-effective investigation for the prevention of heart attacks, and in spite of the fact that CAC is readily accessible in major centres throughout the country. Its cost has come down over the years as well, and at writing is around $150–200 per test — a good investment to protect your future heart health.

High CVD risk
Those at high CVD risk (more than 20% risk of heart attack or stroke over the next five years) clearly are ‘in trouble’ and need to take not only urgent, but also extreme measures to improve the situation. High risk means at least 4% chance of having a CVD event per annum — this is almost as high as having had a previous heart attack.

According to recent US guidelines, as well as NVDP Australian guidelines, all people at high risk require statins to lower cholesterol. In general, high doses of the most powerful statins are required (for example, atorvastatin 40 mg or 80 mg daily, or rosuvastatin 20 or 40 mg daily). Aspirin (100 mg, enteric-coated to minimise the risk of developing of activating a stomach
ulcer) is also generally recommended, as are medications (if necessary) to control blood pressure and diabetes. Smoking is a definite no-no. Other CVD risk factors may also need attention; for example, psychological factors, diet, overweight and exercise.

**Stopping smoking**
Many health professionals say smoking is the Number One health and cardiac enemy. There is only one solution and that is to STOP. I know it is not easy, but I have seen many patients successfully, if somewhat painfully, do it and they are all much the better for it, and not only in their cardiac health issues.

These days there are some excellent tools, strategies, chemical props such as nicotine patches, sprays and so on to help you through the detoxing period. Go and see your GP and ask to be put on a suitable stop smoking program. It is probably the most important appointment you will make in the next few years.

**Nutrition**
How often have you heard the expression: ‘You are what you eat’? Or the less appealing one, which says ‘You dig your grave with your teeth’?

Nutrition is a better word to use than ‘diet’ because nutrition means nourishing, keeping alive, and healthy by means of the food we consume daily. It is not only about energy, and calories, but more about balance.

There is really no ‘good’ or ‘bad’ food — it depends entirely upon the circumstances we are discussing. For example, what’s ‘good’ for an African native crossing the desert is completely different from what is ‘good’ for an Eskimo about to set off hunting seals in sub-zero temperatures.

If you are really serious about improving your food intake, the best thing to do is to go and see a registered dietitian to create an eating program for you. Again, your GP can refer you to one who will suit your needs.
In the most general terms, I believe a good diet in our society is based on fresh fruit and vegetables, whole grains, low-fat protein, very low in sugar and salt, and very, very low in processed foods.

Personal, I am very much favour the Mediterranean diet of complex carbohydrates, some olive oil, meat or fish as a accompaniments, rather than being the centre of a meal, and to finish with fresh fruit for dessert.

This is what my family would eat in a normal day. Breakfast is homemade sugar free muesli (if you are on a gluten free diet you can base it on rice/oat cereals) with lots of seeds and some nuts, and not much dried fruit. We made up a big batch once a week, so it is nice and fresh. My wife adds fresh grated apple to each serve, fresh soft fruit such as strawberries, raspberries, stone fruit or whatever is in season, topped with low fat, sugar free yoghurt.

If we are very hungry we might have wholemeal toast with sliced avocado or fresh tomato with a dash of olive oil as second course.

Mid morning: A large cappuccino with fat-free milk and an apple or other fruit.

Lunch is a large salad or salad sandwich with chicken or tuna, a couple of mandarins or an orange or other fruit of choice. In winter it might be homemade soup with a whole meal bread roll.

Afternoon tea: a good handful of unsalted nuts and an herb or green tea.

Dinner is often baked or grilled fish, a small potato or steamed brown rice and a huge salad full of colour and flavour. Yes, we do have dessert on weekends when there is time, but it is usually home stewed fruit done as a crumble with a muesli and nut topping, and fat-free yoghurt. Home-made custard with home-baked rice pudding or baked fruit is nice in winter.

The key is — and I hope this will not be a problem — home preparation, when you know what goes into the food you eat. My wife says it is much more work than just buying things off the
supermarket shelf. But she is willing to make the effort, and as she is healthy, busy (with all that food preparation, she says!), clear-eyed and youthful for her age. Our daughter-in-law, who has two small children, is a health professional and a very busy person, who finds time to home cook almost all the family food, and is a shining example of glowing good looks, good health and high energy.

Of course, we eat cake on birthdays (but leave the fatty, sugary icing!) and at dinner parties we eat what is put in front of us, merely skipping the add-ons like high fat dips, chocolates and the cheese platter.

There is no space for recipes or food hints in this chapter, but please look at the excellent chapter on nutrition by Andy Sinclair in Life Surfing Life Dancing, the previous book in this series.

Getting a move on

No-one is going to be surprised that I am putting exercise high on the list of things you can do for your cardiac health. We all know it, but do we actually do it? Look at children in the kindergarten playground — they are never still. Always running, jumping, and skipping about. Where did all that energy and wish to use our bodies for the pleasure of movement go? As we age, we seem to do less and less. We sit in front of the TV and the computer screen. By late middle age we should monitor our physical activity to make sure we are doing enough.

Regular physical activity helps combat risk factors such as high blood pressure and being overweight, two of the most important cardiac issues which are within your control.

To get any real health benefit the Heart Foundation recommends you do a minimum of 30 minutes of moderate physical activity, such as brisk walking each day. And by that I don’t mean a nice amble around the local street, looking at the neighbours’ gardens and stopping for the odd chat. I mean a bit of serious momentum, and I mean doing it virtually every day.
You will not risk a heart attack if you stop for a few days because you have a cold, or you go on a holiday for a week, or you are away on holiday, but you will not gain any real cardiovascular benefit if you only get moving once or twice a week.

Many patients are pleased to hear that they do not have to do the whole 30 minutes all in one brisk exercise session. You can break it down into three 10-minute sessions if you prefer.

As we grow older, walking is one of the most popular exercise forms. It doesn’t cost anything. You can do it when you like and where you like, you don’t need expensive equipment or garments other than good shoes, it is non-competitive, so there is no stress and you can do it in company, so it is less lonely than, for example, lap swimming. But you have to actually do it. There is no point in buying expensive walking shoes and a shady cap, and then leaving them in the hall cupboard.

Of course, as we get older we are faced with the problem of having arthritis that often interferes with our capacity to exercise. For example, many people develop osteoarthritis (wear and tear arthritis) in the feet, ankles, knees and hips, which are the weight-bearing joints and which take the strain of our walking in an upright posture. The back and neck, of course, are also involved in weight bearing and often suffer from the inevitable joint and ligament wear and tear as we get older.

Because this is such a serious and important issue, it’s important to get advice at a very early stage from the best people you can. There are expert podiatrists, physiotherapists, and exercise physiologists your GP can refer you to for help. Use their expertise and invest in good pair of orthotics or walking shoes. Go to exercise classes. Go to aqua-aerobics at the local pool. Remember the SKI principle and Spend the Kid’s Inheritance on yourself!

Regular exercise has many benefits:

• You are less likely to have a heart attack.
• You have more energy.
• You have better control of your weight.
• Your ‘good’ HDL cholesterol level improves.
• Your blood pressure improves.
• Your bone density can improve.

Plus, you’re likely to live longer! Well worth a regular brisk walk with a few like-minded friends.

Weighty issues
Of course, you can’t talk about a good diet without touching on weight issues. Being overweight is a health risk in many ways, but very much so in cardiac health. We all know the expression ‘having a heavy heart’. Your weight is not only about how you look. Your weight and body shape have a considerable impact on your health. Men tend to carry any excess weight around their middle — we all know that expending waistline look — just look at the results of those years of business lunches! Women, on the other hand, tend to carry excess weight on their hips and their thighs. We call these the Apples and Pears. Men are apples. Women tend to be pears. Excess weight around your middle (being ‘apple-shaped’) is more of a health risk than excess weight is on your hips and thighs (being ‘pear-shaped’).

Measuring the waist circumference is a simple way to check how much body fat you have. Waist measurement guidelines increase a person’s understanding of their likelihood of developing lifestyle-related chronic diseases. These diseases include heart attack and stroke, type 2 diabetes and some cancers.

The following waist circumferences are associated with increased risk of developing chronic diseases:

Increased risk:
• Adult men: more than 94 cm
• Adult women: more than 80 cm.

Greatly increased risk:
• Adult men: more than 102 cm
• Adult women: more than 88 cm.
The above waist measurements are recommended for adult Caucasian men and Caucasian and Asian women, with other community groups and ages yet to be determined.

**Body mass index**

Body mass index, or BMI, is used to judge whether you are underweight, overweight, obese or in a normal weight range for your height. It is useful to know this, and consider it alongside waist circumference, as increases or decreases in weight outside the ideal range may increase your health risks.

BMI is measured simply by dividing weight (in kg) by the square of the height (in metres). So, a person of height 1.6 metres and a body weight of 100 kg has a BMI of $100/1.6^2 = 39$.

Here are the ranges for BMI:
- BMI less than 18: underweight
- BMI 18–24: normal
- BMI 25–29: overweight
- BMI over 30: obese.

**Blood pressure**

Blood pressure varies from moment to moment. It is affected by many factors, including body position, breathing, your emotional state, physical activity and sleep. There is no ‘normal’ or ‘ideal’ blood pressure reading. The following figures should only be used as a guide:

- Normal: Less than 120/80
- High/Normal: Between 120/80 and 140/90
- High: Equal to or more than 140/90
- Very High: Equal to or more than 180/110. Your doctor may give you medication for to lower your BP. You should also have no added salt and check salt content of all your food.
Blood pressures need to be measured while relaxed, in a quiet warm room, and three consecutive levels three to five minutes apart are recommended to obtain reliable readings.

You can see these conditions may not easily apply to your GP’s consulting room, so he or she often will ask you to take your own BP levels at home soon after awakening, when BP is at its lowest. Home monitoring kits are readily available and relatively inexpensive at your pharmacist — if you have any BP problem, get one and keep a diary of your BP levels at least three times a week to show to your GP. It’s a good way to monitor how well your BP is controlled.

Healthy minds
As we said earlier, our mental state has been shown to have considerable impact on our physical state, in particular our cardiovascular system. People who are isolated, lonely, anxious or depressed have higher rates of heart disease.

So, if you feel you are at risk here, take positive action. Yes, I know when you are in that state taking action is even harder, but you must try. In our previous publication there were several very good chapters on psychological issues and stress. Have a read. Look up the Beyond Blue website. Choose to see funny movies, read entertaining books (I can still get a laugh out of a P. G Wodehouse books or an old episode of Yes Minister or a John Cleese TV series). Spend time with cheerful friends.

I saw a health study that showed even if you look at photographs of happy faces for 10 minutes a day you can improve your own sense of wellbeing. I went to a talk by a psychologist, who ended her presentation on Life Balance by saying: ‘You can choose to be with people who nourish you or people who drain you. Try to avoid the drainers.’

We have just spoken about exercise for physical health, but one of the added benefits of regular exercise is better mental health. Exercise is good for the body and good for the soul.
So, take heart, there is a lot you can do for your cardiac health: Your heart works for you, beating steadily (we hope) from before you are born to the last moment of your life. The least you can do for this hard-working organ is to be aware of its needs and do what you can to support it.