

matters of the **HEART**

WORKING OUT OFTEN AND EATING WISELY MAY NOT BE ENOUGH TO SAVE YOUR TICKER. FIND OUT ABOUT THE OTHER CAUSES OF HEART DISEASE.

BY NG MEI YAN PHOTOGRAPHY BY FRENCHESCAR LIM

It pays to know your numbers where heart disease is concerned. For starters, it is the number-one killer among women – eight times more so than breast cancer. By 2025, it is estimated by the American Heart Association that more than 1.5 billion people around the world, or nearly one in three adults over the age of 25, will have high blood pressure – a precursor to heart disease. And it's not just about avoiding a sedentary lifestyle and fatty foods either. Recent studies show that other lifestyle factors may also put your heart in danger. Find out what they are and reduce your odds today.

1 *You slog on even when you're tired.*

It's 9pm on a Monday. You're on your fourth cup of coffee for the day – and you're still working on that urgent report at the office. The next time you find yourself doing that, do your heart a favour: Pack up, go home and continue working the next morning. Researchers at the University of Alabama at Birmingham found that tired people experienced bigger spikes in blood pressure as compared to those who are well rested. This is because they increase their effort to compensate for their diminished capability, says study author Rex Wright.

Dr Goh Ping Ping, medical director of the Singapore Heart Foundation and chairperson for the Go Red For Women campaign, agrees with the results of the study. "When a person is already fatigued but still forces herself to work harder, there is tremendous mental stress which will raise the blood pressure and stress out the heart," says Dr Goh. She has encountered patients whose blood pressure becomes elevated during a stressful period of time, but reverts to normal when the stress is removed.

However, there is no conclusive evidence that stress actually causes long-term high blood pressure. Meanwhile, it is known that frequent spikes in blood pressure that occur over long periods of time can have the same harmful effect on the heart, kidneys and brain, just like chronic hypertension, says Dr Goh. It is also possible that these sudden peaks in blood pressure damage the walls of the arteries and accelerate their narrowing. In this way, stress can put you at a higher risk of heart disease.

♥ **SAVE YOUR HEART:** Since multi-tasking is the way of life for modern women, time management is important. "Set realistic expectations for the amount of work you can comfortably handle in a day and invest time in exercise and relaxation," says Dr Goh. Even if you're facing a looming deadline, give yourself a breather. Set the alarm every hour to remind yourself to get up for a stretch, or walk out for some fresh air. Bringing in a potted plant may also lower the stress level in your work environment. A recent US study revealed that people who worked in offices with plants and windows felt better about their jobs.

2 You're depressed.

Depression has long been one of the risk factors of heart disease and it is only recently that experts discovered why. Researchers at Purdue University in the US found that physical depressive symptoms, such as loss of appetite, sleep problems or fatigue, are associated with the narrowing of coronary arteries. This blocks or slows the flow of blood to the heart and brain, and can result in a heart attack or stroke.

Dr Goh's take on the depression-and-heart-disease link is this: When a person is depressed, she is less likely to exercise regularly or take her medicines conscientiously to manage risk factors such as high blood pressure and high cholesterol levels. Depressed patients are also likely to smoke, overeat or binge-drink – all of which are bad for the heart.

Unfortunately, it has been reported that women are more than twice as likely to succumb to the blues than men. And depression is also more common in patients who have suffered a heart attack or heart failure. "In fact, for patients who've had a heart attack, the risk of dying within the next six months is increased three to four times if they also suffer from depression," says Dr Goh.

♥ **SAVE YOUR HEART:** Getting your depression treated does not prevent heart disease per se, but it is important to address the symptoms to improve your well-being, say experts. "A person who is not depressed is definitely better able to take charge of her heart health," says Dr Goh. If you experience feelings of sadness or hopelessness, lose or gain weight because of appetite changes or have trouble sleeping, speak to your GP.



Maintaining healthy teeth and gums can prevent heart disease.

3 You have bad gums

Large-scale population studies have found a relationship between severe gum disease and the increased prevalence of heart disease, says Associate Professor Grace Ong, head of the Department of Preventive Dentistry at National University Hospital. When you have periodontal disease, bacteria can get into the blood stream and reach the heart and its main vessels, explains Dr Ong. These bacteria can form blood clots in the vessels which lead to heart attacks.

That's not all: When oral bacteria enters the bloodstream, it triggers the liver to make C-reactive proteins, a risk predictor for heart disease, according to a study by the University of Buffalo in the US. Other studies have also found that those with gum disease tend to have narrower arteries.

♥ **SAVE YOUR HEART:** Check for signs of early oral disease like bleeding gums, soreness, slight pain or bad breath. At this stage, the disease is still reversible, says

The facts behind HEART-FRIENDLY FOODS

Here's a look at what you should include in your diet.

● **NOT THE SAME BENEFITS**
In a recent UK study, it was found that flavonoid-rich chocolate or cocoa promotes blood flow in the veins and reduced blood pressure, but did not seem to have an effect on bad LDL cholesterol. In the same study, soya protein reduced blood pressure and LDL, but did not improve HDL. And while green tea (the highly regarded superfood) reduced bad cholesterol, it was black tea that actually increased blood pressure.

● **TRY TUNA TOO**
Besides salmon, fresh tuna is also one of the richest sources of omega-3 fatty acids. Get two servings of omega-3-rich fish per week, says Natalie Goh, dietitian at Peaches and Pear Nutrition Consultancy. Other fish to try include mackerel, herring and trout.

● **TAKE CALCIUM**
Other than building strong bones and teeth, calcium also regulates your heartbeat and helps blood clot normally, says Natalie. Women under the age of 50 should get 800mg (about the amount you get in three glasses of milk) a day.

● **NEW KID ON THE BLOCK**
A recent study has suggested that Chinese red yeast rice may help reduce the risk of getting another heart attack by 45 per cent among patients. The need for bypass surgery or angioplasty was reduced by a third among those taking the extract, marketed as Hypocol in Singapore. More studies are needed to confirm this, but experts believe it's because it contains lovastatin, a drug that lowers cholesterol levels.

Dr Ong. If your gums bleed, brush better (two minutes is the minimum) and floss. Or try interdental aids (tiny sticks or brushes) that let you reach between your teeth to remove plaque. But if the bleeding persists for three to four days, you should see a dentist as it may signify a more serious condition.

4 *You cut out salt from your diet*

Salt contains sodium which is bad for your blood pressure: That's what we've been told. But new research shows it may not be so clear-cut. A recent study published in the *Journal of General Internal Medicine* found that people who ate the least salt were 80 per cent more likely to die of cardiac disease as compared to 25 per cent who ate the most salt. The researchers say that while high salt intake may be harmful to heart health, those who are healthy need not restrict themselves to a low-salt diet.

♥ **SAVE YOUR HEART:** Local doctors are not biting just yet. "That study spanned over six to 12 years. The subjects involved may have changed their dietary habits over time and we do not have any data on that," says Dr Lim Ing Hann, consultant cardiologist at Tan Tock Seng Hospital. One thing's for sure: A high sodium intake stiffens the arteries and increases cardiac muscle mass – both factors raise your blood pressure. It also brings about hormonal changes that cause hypertension, says Dr Lim.

But there's no need to be finicky or avoid salt altogether. It is needed to transport nutrients, transmit nerve impulses and contract muscles. Limit your intake to 6g or about a teaspoon a day.

5 *You work in a polluted environment*

Cigarette smoke and chemical fumes do more than damage your lungs. A recent US study found that air pollution has both short-term and long-term toxic effects on the heart and blood vessels. "It is possible that ultra-fine particles may get into your blood circulation where they can decrease coronary flow in your blood vessels and to your heart," says Dr Poh Kian Keong, consultant cardiologist at National University Hospital. In earlier studies, inhaled pollutants were found to increase free-radical levels that not only trigger inflammation in the lungs, but also harm the heart and cardiovascular system.

♥ **SAVE YOUR HEART:** If you have an existing heart condition, keep your workouts to the gym. If not, wait two hours after peak traffic conditions before heading out for your jog. During the haze season or if you work in a polluted environment, try wearing a mask, says Dr Poh.