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# Why your cardio health depends on a good night's rest

## Insomniacs at higher risk of death, heart attack and cardiovascular disease, researchers find

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We spend about a third of our lives asleep. And sleep is vital for overall health and well-being, as a time of recovery for the body and mind, says Cavan Chan, a Hong Kongbased sleep and functional medicine health coach.

During different phases of sleep, metabolic waste is removed, cells undergo repair and regrowth, and our memories are reorganised and consolidated.

"It is because of this restorative effect that sleep can be considered the foundation of wellness," Chan says.

About 30 per cent of the world's population is affected by insomnia – difficulty in falling or staying asleep, getting enough of it, or sleeping well. About 44 per cent of patients with heart disease experience this disorder, too, a study published last month in the journal PLoS One suggests.

The short- and long-term consequences of such sleep deprivation are well documented. Short-term effects include irritability, fatigue, poor concentration, anxiety, memory problems, poor balance, low mood, and increased cravings for unhealthy food.

In the long term, a lack of sleep may affect your cognitive function, weaken your immune system, and raise your risk of suffering from obesity and diabetes.

New studies show insufficient good-quality sleep is also bad for the heart.

In June 2023, the American Heart Association announced that healthy sleep is essential for optimal cardiovascular health, along with seven other health and lifestyle habits: limiting nicotine exposure; exercising; maintaining a healthy weight; eating a nutritious diet, and; keeping cholesterol, blood glucose and blood pressure levels in check.

In February 2023, the American College of Cardiology presented new research which showed that people who had five hours of sleep a night or less were at the greatest risk of experiencing a heart attack.

And a study from the University of Sydney in Australia, published in March 2023 in the journal BMC Medicine, found that poor sleep is linked to years of poor cardiovascular health.

The recently published PLoS One research – a review and analysis of multiple studies of the links between insomnia and heart health – concluded that people with insomnia experience a higher risk of death, heart attack, and cardiovascular disease.

Hong Kong cardiologist Dr Adrian Cheong explains the connection: "The body follows a circadian rhythm – this is our internal clock, which affects our sleep patterns and controls the other ways our body works and repairs itself," he says.

"These repair and regeneration patterns all affect our heart. If we sleep poorly, too little, or even too much, it disrupts our body's repair and regeneration patterns and our hormonal patterns, and this may cause accelerated damage to our heart and vascular system."

But getting the recommended seven to eight hours of goodquality sleep can be a challenge.

Stress is a main reason for poor sleep, says Chan. We are unable or unwilling to release whatever is bothering us mentally or emotionally before going to bed. The stress leaves us tossing and turning, waking up feeling less than refreshed.

Obstructive sleep apnoea (OSA) is another reason for interrupted sleep. Cheong says OSA can cause sufferers to stop breathing multiple times during the night, affecting their blood pressure and putting pressure on their heart and other organs.

Common risk factors associated with OSA include being overweight, having a thicker neck, having a narrowed airway, and certain health problems such as atrial fibrillation – an irregular heartbeat. Being male or elderly, and having a family history of OSA, also increases your risk.

Shift workers, and frequent travellers including pilots and flight attendants who experience jet lag from constantly being in different time zones, have a particularly difficult time getting good-quality sleep.

"Studies show that the risk of developing high blood pressure, stroke and heart attack is higher in this group, as their sleep patterns are often disrupted," Cheong says.

"People who regularly deal with jet lag tend to have high levels of stress hormones like adrenaline and cortisol circulating through their blood; their body has to keep producing these hormones to counter the effects of the jet lag, and this can affect their heart."

For a restful and uninterrupted night's sleep, it's important to follow a schedule: turning in and waking up at the same time every day.

Experts also recommend avoiding alcohol, caffeine, heavy meals and stimulating activities a few hours before bedtime, and to practise a wind-down ritual – Cheong suggests having a warm bath, reading, or doing another relaxing activity to help induce sleep.

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CAVAN CHAN, SLEEP COACH