2 ways to protect your heart: Improve sleep and manage stress

If you have heart disease, you're probably all too familiar with tenets of a heart-healthy lifestyle; eat wisely, get regular physical activity, keep weight, blood pressure, and blood sugar on target; and if you smoke, quit. What you might not know is that sufficient, good-quality sleep and stress control also offer genuine benefits to your heart.

Sleep

Two sleep-related problems that plague many people — sleep deprivation and sleep apnea — have been linked to a higher risk of heart disease.

- **Sleep deprivation**. Over time, inadequate or poor quality sleep can increase the risk for a number of chronic health problems, including heart disease. Studies have linked short-term sleep deprivation with several well-known contributors to heart disease, including high cholesterol, high triglycerides, and high blood pressure.

- **Sleep apnea.** This common cause of loud, disruptive snoring makes people temporarily stop breathing many times during the night. Up to 83% of people with heart disease also have sleep apnea, according to some estimates.

  In the most common form, obstructive sleep apnea, soft tissue in the upper part of the mouth or back of the throat completely blocks the airway. Oxygen levels dip and the brain sends an urgent "Breathe now!" signal. That signal briefly wakes the sleeper and makes him or her gasp for air. That signal also jolts the same stress hormone and nerve pathways that are stimulated when you are angry or frightened. As a result, the heart beats faster and blood pressure rises—along with other things that can threaten heart health such as inflammation and an increase in blood clotting ability.

If you snore often and loudly — especially if you find yourself tired during the day — talk with your doctor about an evaluation for sleep apnea.

Check your stress (and negative thoughts) at the door

A growing body of evidence suggests that psychological factors are — literally — heartfelt, and can contribute to cardiac risk. Stress from all sorts of challenging situations and events plays a significant role in cardiovascular symptoms and outcome, particularly heart attack risk. The same is true for depression, anxiety, anger, hostility, and social isolation. Acting alone, each of these factors heightens your chances of developing heart problems. But these issues often occur together, for example, psychological stress often leads to anxiety, depression can lead to social isolation, and so on.

Does reducing stress, or changing how you respond to it, actually reduce your chances of developing heart disease or having a heart attack? The answer isn't entirely clear, but many

studies suggest the answer is "yes." There is much to learn about exactly how. Research indicates that constant stress contributes biologically to heart disease risk factors such as high blood pressure and the formation of artery-clogging deposits. Other research finds that chronic stress may make it harder to sleep, eat well, quit smoking, and exercise.

Fortunately, you can learn healthier ways to respond to stress that may help your heart and improve your quality of life. These include relaxation exercises (deep breathing, guided imagery), physical activity (walking, yoga), and staying connected with friends, co-workers, family members.

For more on taking control of coronary artery disease and protecting yourself from a heart attack, buy **Diagnosis: Coronary Artery Disease**, a Special Health Report from Harvard Medical School.