







# HOW Stress AFFECTS YOUR HEALTH

Stress: We've all felt it. Sometimes stress can be a positive force, motivating you to perform well at your piano recital or job interview. But often — like when you're stuck in traffic — it's a negative force. If you experience stress over a prolonged period of time, it could become chronic — unless you take action.

## A NATURAL REACTION

Have you ever found yourself with sweaty hands on a first date or felt your heart pound during a scary movie? Then you know you can feel stress in both your mind and body.

This automatic response developed in our ancient ancestors as a way to protect them from predators and other threats. Faced with danger, the body kicks into gear, flooding the body with hormones that elevate your heart rate, increase your blood pressure, boost your energy and prepare you to deal with the problem.

These days, you're not likely to face the threat of being eaten, but you probably do confront multiple challenges every day, such as meeting deadlines, paying bills and juggling childcare that make your body react the same way. As a result, your body's natural alarm system — the "fight or flight" response — may be stuck in the "on" position, and that can have serious consequences for your health.

## **PRESSURE POINTS**

Even short-lived, minor stress can have an impact. You might get a stomachache before you have to give a presentation, for example.

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More major acute stress, whether caused by a fight with your spouse or an event like an earthquake or terrorist attack, can have an even bigger impact.

Multiple studies have shown that these sudden emotional stresses — especially anger — can trigger heart attacks, arrhythmias and even sudden death.<sup>1</sup> Although this happens mostly in people who already have heart disease, some people don't know they have a problem until acute stress causes a heart attack or something worse.

## **CHRONIC STRESS**

When stress starts interfering with your ability to live a normal life for an extended period, it becomes even more dangerous. The longer the stress lasts, the worse it is for both your mind and body.

You might feel fatigued, unable to concentrate or irritable for no good reason, for example. But chronic stress causes wear and tear on your body, too.

Stress can make existing problems worse.<sup>2</sup> In one study, for example, about half the participants saw improvements in chronic headaches after learning how to stop the stress-producing habit of "catastrophizing," or constantly thinking negative thoughts about their pain.<sup>3</sup>

Chronic stress may also cause disease, either because of changes in your body or the overeating, smoking and other bad habits people use to cope with stress.





Job strain — high demands coupled with low decisionmaking latitude — is associated with increased risk of coronary disease, for example.<sup>4</sup> Other forms of chronic stress, such as depression and low levels of social support, have also been implicated in increased cardiovascular risk.

And once you're sick, stress can also make it harder to recover. One analysis of past studies, for instance, suggests that cardiac patients with so-called "Type D" personalities — characterized by chronic distress — face higher risks of bad outcomes.<sup>5</sup>

## WHAT YOU CAN DO

Reducing your stress levels can not only make you feel better right now, but may also protect your health long-term.

In one study, researchers examined the association between "positive affect" — feelings like happiness, joy, contentment and enthusiasm — and the development of coronary heart disease over a decade.<sup>6</sup> They found that for every one-point increase in positive affect on a five-point scale, the rate of heart disease dropped by 22 percent.

While the study doesn't prove that increasing positive affect decreases cardiovascular risks, the researchers recommend boosting your positive affect by making a little time for enjoyable activities every day.

Other strategies for reducing stress include:

- Identify what's causing stress. Monitor your state of mind throughout the day. If you feel stressed, write down the cause, your thoughts and your mood. Once you know what's bothering you, develop a plan for addressing it. That might mean setting more reasonable expectations for yourself and others or asking for help with household responsibilities, job assignments or other tasks. List all your commitments, assess your priorities and then eliminate any tasks that are not absolutely essential.
- **Build strong relationships.** Relationships can be a source of stress. Research has found that negative, hostile reactions with your spouse cause immediate changes in

stress-sensitive hormones, for example.<sup>7</sup> But relationships can also serve as stress buffers. Reach out to family members or close friends and let them know you're having a tough time. They may be able to offer practical assistance and support, useful ideas or just a fresh perspective as you begin to tackle whatever is causing your stress.

- Walk away when you're angry. Before you react, take time to regroup by counting to 10. Then reconsider. Walking or other physical activities can also help you work off steam. Plus, exercise increases the production of endorphins, your body's natural mood-booster. Commit to a daily walk or other form of exercise — a small step that can make a big difference in reducing stress levels.
- Rest your mind. According to APA's 2012 Stress in America<sup>™</sup> survey, stress keeps more than 40 percent of adults lying awake at night. To help ensure you get the recommended seven or eight hours of shut-eye, cut back on caffeine, remove distractions such as television or computers from your bedroom, and go to bed at the same time each night. Research shows that activities like yoga and relaxation exercises not only help reduce stress, but also boost immune functioning.<sup>8</sup>
- Get help. If you continue to feel overwhelmed, consult with a psychologist or other licensed mental health professional who can help you learn how to manage stress effectively. He or she can help you identify situations or behaviors that contribute to your chronic stress and then develop an action plan for changing them.

<sup>&</sup>lt;sup>1</sup> Krantz, D. S., Whittaker, K. S., & Sheps, D. S. (2011). "Psychosocial risk factors for coronary artery disease: Pathophysiologic mechanisms." In Allan R., Fisher, J. (Eds.), *In Heart and Mind: Evolution of Cardiac Psychology*, (pp. 91–113). Washington, DC: APA.

<sup>&</sup>lt;sup>2</sup> Kiecolt-Glaser, J., & Glaser, R. Stress and health research homepage: http://pni.osumc.edu.
<sup>3</sup> Thorn, B. E., Pence, L. B., et al. (2007). "A randomized clinical trial of targeted cognitive behavioral treatment to reduce catastrophizing in chronic headache sufferers." *Journal of Pain*, *8*, 938–949.

<sup>&</sup>lt;sup>4</sup>Krantz, D. S., & McCeney, M. K. (2002). "Effects of psychological and social factors on organic disease: A critical assessment of research on coronary heart disease." *Annual Review of Psychology*, *53*, 341–369.

<sup>&</sup>lt;sup>5</sup>Denollet, J., et al. (2010). "A general propensity to psychological distress affects cardiovascular outcomes: Evidence from research on the type D (distressed) personality profile." *Circulation: Cardiovascular Quality and Outcomes*, *3*, 546–557.

<sup>&</sup>lt;sup>6</sup>Davidson, K. W., Mostofsky, E., & Whang, W. (2010). "Don't worry, be happy: Positive affect and reduced 10-year incident coronary heart disease: The Canadian Nova Scotia Health Survey." *European Heart Journal*, *31*(9), 1065–1070.

<sup>&</sup>lt;sup>7</sup> Kiecolt-Glaser, J., & Glaser, R. Stress and health research homepage: http://pni.osumc.edu. <sup>8</sup> lbid.