

Press Reset on Stress

What is stress?

Stress is a physical and emotional reaction that people experience as they encounter challenges in life. When you're under stress, your body reacts by releasing hormones that produce the "fight-or-flight" response. Your heart rate and breathing rate go up and blood vessels narrow, restricting the flow of blood. Occasional stress is a normal coping mechanism; however, long-term stress or chronic stress may contribute to or worsen a range of health problems.

The Effects of Chronic Stress on the Body

Chronic stress negatively impacts every organ system of the body, down to your cells and molecules: "fight or flight" response overdrive, elevated stress hormones, disrupted sleep, muscle tension, metabolic dysfunction, immune dysregulation, and inflammation. Chronic stress has been linked to the development of some diseases, such as cardiovascular disease, diabetes, cancer, autoimmune diseases, and mental illnesses (such as depression and anxiety disorders). Using alcohol or drugs to dull the effects of stress can make the problem worse and interfere with sleep.

Acute stress, chronic stress, and anxiety: What's the difference?

- **Acute stress** is a response to an external event, such as taking a big test or arguing with a friend. Acute stress goes away once the situation is resolved.
- **Chronic stress**, however, lasts for weeks, months, or longer. As you go about your life, your body is acting as if you're being threatened. Causes of chronic stress include routine stress from the demands of work or school; family or money problems; stress from sudden, difficult changes in your life, such as divorce or illness; and traumatic stress, which may happen when you're in danger of serious harm or death.
- **Anxiety** is a common mental reaction to stress and can occur even if there is no current threat. Both stress and anxiety can affect your mind and body, and some of the symptoms are the same.

If anxiety doesn't go away or you are struggling to cope, it may be time to talk to a professional. If you are in immediate distress or are thinking about hurting yourself, call, text, or chat with 988 (<https://988lifeline.org>). This three-digit number will route you to the 988 Suicide & Crisis Lifeline, which is now active across the United States (and soon Canada). You also can text the Crisis Text Line (*HOME* to 741741) or visit <https://www.crisistextline.org>. These two services provide 24-hour, confidential support to anyone in suicidal crisis or emotional distress.

How do I press reset on stress?

While there is no drug to cure stress, people do have access to a built-in "stress reset button" that acts as an antidote to stress. It's called the *relaxation response*. In contrast to the *stress response*, the relaxation response slows the heart rate, lowers blood pressure, and decreases oxygen consumption and levels of stress hormones.

Creating the relaxation response through the use of relaxation techniques and mindfulness can counteract the negative effects of stress. Research evidence is accumulating that these can reduce blood pressure, inflammatory cytokines, and oxidative stress, as well as improve glucose metabolism and sleep.

Chronic stress increases	Relaxation response decreases
<ul style="list-style-type: none"> • Heart rate • Muscle tension • Breathing • Glucose in bloodstream • Blood pressure • Buildup of plaque in arteries • Oxygen consumption Risk of diabetes, peptic ulcers, viral infection • Stress hormones 	<ul style="list-style-type: none"> • Heart rate • Oxidative stress • Blood pressure • Stress hormones • Inflammatory cytokines • Muscle tension • Elevated blood glucose

Pressing reset on stress can be done anywhere, anytime.

At your desk, in your bed, or doing dishes, simple tools such as deep breathing, progressive muscle relaxation, and mindfulness can produce the relaxation response.

Slow, Deep Breathing (also called *Diaphragmatic Breathing*)

For deep breathing exercises, take a few slow deep breaths, letting your abdomen expand as you fill up your lungs, then breathe out slowly and completely. Notice where you may be holding some tension—throat, shoulders, chest—and relax so that each breath becomes slower and deeper.

Progressive Muscle Relaxation

This technique involves relaxing different muscles in your body, progressing from head to toe, or toe to head. Briefly contracting each muscle before relaxing, it can help you feel which muscle is tense. At the same time, take deep breaths, inhaling through the nose and exhaling through the mouth.

Mindfulness

For a mindfulness exercise, focus on being aware of what you're sensing and feeling in the moment—sight, sound, smell, taste, or touch. Mindful body scan practice involves focusing attention on different parts of your body and their sensations in a gradual sequence. You can combine mindfulness with the other muscle relaxation and breathing techniques.

Conclusion

Whether you are suffering from acute stress, chronic stress, or anxiety, there are simple tools that can help. Pressing reset on stress for just a few minutes several times a day can prevent stress from building up and can lead to better sleep, giving you more energy the next day.

U.S. National Institutes of Health (NIH), National Center for Complementary and Integrative Health (NCCIH). (Updated 2022, April). *Press reset on stress*. Retrieved November 6, 2023, from <https://www.nccih.nih.gov>

