



Stress & Your Health

WHAT IS STRESS?

Generally speaking, stress means pressure or strain. Life constantly subjects us to pressures. In people, stress can be physical (as in having disease), emotional (as in feeling grief), or psychological (as in being afraid).

Genes and things that happen to you early in life (such as child abuse or neglect), even when in the womb, can affect how you handle stressful situations, possibly making you more likely to over-react. Overeating, smoking, drinking, and not exercising, which are often reactions to being under stress, can add to the negative health effects of stress.

DID YOU KNOW?

Individuals vary in their ability to cope with stress. How you see a situation and your general physical health are the two major factors that determine how you will respond to a stressful event or to repeated stress.

WHAT IS THE STRESS RESPONSE?

Allostasis is the process of how the body responds to stress, whether it is acute (short-term) or chronic (long-term).

The best-known acute stress response is the “fight or flight” reaction that happens when you feel threatened. In this case, the stress response causes the body to release several stress hormones, such as cortisol and adrenalin (also known as epinephrine), into the bloodstream. These hormones increase your concentration, ability to react, and strength. Also, your heart rate and blood pressure increase, and your immune system and memory are sharper. After you have dealt with the short-term stress, your body returns to normal.

Chronic or long-term stress, however, poses a problem. If you frequently face challenges, your body is constantly producing higher levels of stress hormones and does not have time to recover. These hormones build up in the blood and, over time, can cause serious health problems.

HOW DOES CHRONIC STRESS AFFECT YOUR HEALTH?

The bodily changes that happen during moments of stress can be very helpful when they happen for a short time. But when this happens for a long period of time, producing too many stress hormones can affect your health. The long-term effect of chronic stress causes wear and tear on the body. Health problems can include

- **Digestive system:** Stomach pains, due to a slow-down in the rate that the stomach empties after eating; also diarrhea due to more activity in the colon.
- **Obesity:** Increase in appetite, which can lead to weight gain. Being overweight or obese puts you at risk for diabetes and cardiovascular disease.

- **Immune system:** Weakened immune system so that you are more likely to have colds or other infections.
- **Nervous system:** Anxiety, depression, loss of sleep, and lack of interest in physical activity. Memory and decision-making can also be affected.
- **Cardiovascular system:** Increase in blood pressure, heart rate, and the level of fats in your blood (cholesterol and triglycerides). Also, increase in blood glucose levels, especially in the evening, and appetite. All of these are risk factors for heart disease, atherosclerosis (hardening of the arteries), stroke, obesity, and diabetes.

HOW DO YOU KNOW WHEN YOU'RE STRESSED OUT?

When you experience short-term stress, you may feel anxious, nervous, distracted, worried, and pressured. If your stress level increases or lasts for a longer time, you might experience other physical or emotional effects:

- Fatigue, depression
- Chest pain or pressure, fast heartbeat
- Dizziness, shakiness, difficulty breathing
- Irregular menstrual periods, erectile dysfunction (impotence), loss of libido (sex drive)

These symptoms may also lead to loss of appetite, overeating, and poor sleep, all of which can have serious effects on your health. Usually symptoms are minor and may be relieved through coping skills such as learning to relax, removing yourself for a time from the things that stress you out, and exercising. If the symptoms are severe, however, you may need medical help to find the source of your stress and the best way to manage it.

WHAT CAN YOU DO TO REDUCE STRESS?

You can take practical steps to cut back on stress. Regular, moderate exercise improves thought process and mood. Other strategies include relaxing, getting a good night's sleep, and seeking emotional support from family and friends. You can also reduce the long-term effects of chronic stress by eating a healthy, low-fat diet and avoiding smoking and drinking too much alcohol. However, if your symptoms continue or get worse, you should see your doctor.

Questions to ask your doctor

- Are my health problems being caused by stress?
- What can I do to lower the stress I'm feeling?
- What type of exercise is best for me?
- What else can I do to stay healthy?
- Should I see an endocrinologist?

RESOURCES

- Find-an-Endocrinologist: www.hormone.org or call 1-800-HORMONE (1-800-467-6663)
- MedlinePlus (National Institutes of Health-NIH): www.nlm.nih.gov/medlineplus/stress.html
- National Institute of Mental Health (NIH): www.nimh.nih.gov/health/publications/stress/fact-sheet-on-stress.shtml
- Mayo Clinic: www.mayoclinic.com/health/stress-management/MY00435
- American Heart Association: www.heart.org (search for stress management)
- U.S. Department of Health and Human Services: www.womenshealth.gov/faq/stress-your-health.cfm

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The Hormone Health Network offers free, online resources based on the most advanced clinical and scientific knowledge from The Endocrine Society (www.endo-society.org). The Network's goal is to move patients from educated to engaged, from informed to active partners in their health care. This fact sheet is also available in Spanish at www.hormone.org/Spanish.

