Healthy Living

Patient Information from the American Chiropractic Association

Living with Stress

Stress has been called the spice of life, the common cold of the psyche, and even a socially acceptable form of mental illness. No doubt, stress can be beneficial—for example, a deadline can help us focus and become more alert and efficient. Persistent or excessive stress, however, can undermine performance and make us vulnerable to health problems, from cancer and heart disease to substance abuse and obesity.

Stress is a physical and mental response to the difference between our expectations and our personal experience, real or imaginary. While reacting to stress, the body goes through alarm, resistance, and exhaustion. Released hormone epinephrine, or adrenaline, prepares the body for physical action ("fight or flight") by increasing heart rate, blood pressure, and blood glucose levels. Then, the body releases glucocorticoid cortisol, or hydrocortisone, producing anti-inflammatory and immunosuppressing effects.

Consequences of Chronic Stress

Although occasional stress can be of benefit, too much stress is taxing on the body. Excessive levels of glucocorticoids can hinder growth, delay wound healing, and increase risk of infection. Chronic stressors—or their constant anticipation—can make us believe that we must always be on guard, leading to anxiety. Feelings of hopelessness or avoiding solving our problems can spark depression.

Past or present psychological distress can also lead to pain, particularly low-back pain, which often comes with leg pain, headaches, sleep problems, anxiety, and depression. Stress may even be a more powerful pain generator than strenuous physical activity or repetitive motion. Research shows, for example, that pain in adolescents is associated with depression and stress, but not with computer use or physical activity.

Common Stressors

Our lives are surrounded by stressors. Some of the common ones include:

- Bright light, loud sounds
- Events (births, deaths, war, reunions, weddings, divorce, moving)
- Financial difficulties
- Deadlines, rush-hour traffic, or exams
- Personal relationships and conflicts
- Smoking, excessive drinking, insufficient sleep, and poor diet

Stress is highly individual and depends on our circumstances. For example, we react to stress better if we can vent our frustrations, feel in control, hope that things will change for the better, and get social support. Exposure to stress in early childhood, however, can negatively affect the person's stress reaction.

Gender also determines how we handle stress. Women are easily stressed by household problems, conflicts with people, or illness in people they know. Men get more significantly affected by job loss, legal problems, and work-related issues. Men are also more likely to get depressed over divorce or separation and work problems. Depression in women, however, is more likely to spring from interpersonal conflicts or low social support, particularly from family. To cope with stress, men focus on planning rational solutions to problems, positive thinking, humor, day-dreaming, and fantasies. Women seek out social support, or resort to self-blame or wishful thinking.

Stress and Personality

Our personality also influences how we cope with stressful life events. Optimism improves our coping ability by helping us make positive choices, set goals,

Living with Stress

and expect positive outcomes. Optimists often choose to eliminate, reduce, or manage stressors or emotions—instead of ignoring, avoiding, or withdrawing from the problem, reactions that are often unhealthy.

Optimism also predicts better outcomes in stressful medical procedures such as chemotherapy, prevents depression in the elderly, and is associated with healthy aging and lower cardiovascular mortality. Greater happiness has also been linked to lower cortisol levels, better stress responses, lower heart rate in men, and lower systolic blood pressure. Negative thinking, however, may cause depression.

Self-esteem is another important quality. Interestingly, it can even affect our perception of past events. People with higher self-esteem tend to view past events as more positive than originally perceived, while low self-esteem makes people recall their past events as more negative. Negative events also more seriously affect self-perception of people with unstable self-esteem.

Anger, however, doesn't help with stress management—and may be related to many health problems. Aggression can prolong tension-type headaches and lead to depression. Hostility may be related to inflammation and slower wound healing, placing the elderly at risk for coronary heart disease.

Stress on the Job

The workplace has become a major stressor, contributing to the risk of hypertension and heart disease. Recent studies have shown, however, that what stresses us out is not so much the job demands, but our attitude toward them. For example, people who react with anger to their high job strain or who are worried about their chronic work overload have much higher morning corsisol levels. Lack of a sense of control over a job is also associated with higher blood pressure, especially in women and in people with higher socioeconomic status.

Family Stress

But it's not just job stress that can affect our health. Marital problems can also make us feel stressed out, and elevate our cortisol levels and blood pressure.

Family stress also affects children. Stressed-out mothers, for example, report more anxiety and negative emotions and are more frequently angry and intrusive with their children. Such parents' harsh reactions to their children's negative emotions also increase the intensity of children's emotions, making it hard for the children to act in socially competent ways.

Children also learn stress coping skills from their parents, so children of mothers who frequently express negative emotions also have more difficulty coping with their own daily stress. On the other hand, self-esteem, which is very important to children's happiness, is associated with mothers' authoritative parenting style, when the issues are discussed with children, but the mother makes the final decision and establishes reasonable discipline.

Stress Relief Is Important

No matter what stresses you out, consider taking active steps to change your attitude toward stress and to reduce stress in your life. For suggestions on stress relief, see the January/February 2007 issue of JACA Online at www.acatoday.org/jaca.

For references, visit www.acatoday.org/jaca.



For more information on prevention and wellness, or to find a doctor of chiropractic near you, go to the Patient Information section on ACA's Web site at www.acatoday.org or call 800-986-4636.

Nataliya Schetchikova, PhD, **Writer** Carol Kline, MA, **Editor**



This patient information page is a public service of the Journal of the American Chiropractic Association. The information and recommendations appearing on this page are appropriate in most instances, but they are not a substitute for a diagnosis by a specialist. For specific information concerning your health condition, consult your doctor of chiropractic. This page may be reproduced noncommercially by doctors of chiropractic and other healthcare professionals to educate patients. Any other reproduction is subject to ACA approval.