

Stress Can Be Good for You

There's a burning sensation in your upper right shoulder, and you know that within an hour it will feel like someone is grinding a cigarette into your back. That nagging throb over your right eyebrow is beginning to blossom into a killer headache. You write a few words, just to get something down, but they look like gibberish. Hit the delete button. There is an acidic taste in the back of your throat. Think...think! you say to yourself, but inspiration remains out of reach. Your low back is throbbing. Your jaw aches from grinding your teeth. You glance at the clock: one hour and forty-three minutes until you get to go home.

Your boss peeks into your office with a smile and says, "The deadline's been moved up to Monday. You weren't planning on doing anything over the weekend, were you?"

What is Stress?

Stress is any stimulus, from inside or outside our bodies, that demands an adaptive response. It can be anything, good or bad: from getting married, to thinking about next week's deadlines, to being mugged in the street.



Stress has a bad rap, of course, because too much of it will kill you. But what most people don't realize is that too little stress is bad for you, too. And further, although stress itself is

a serious problem for many people, it doesn't have to be. We don't have to be victims of a high-speed, high-demand, high-stress lifestyle. We already possess the equipment we need to deal with every aspect of stress. Our stress response system is specifically designed to help us process the physical and chemical changes that life stressors bring about in our bodies. When our stress response system gets sluggish or out of balance, that's when the physical changes that stress causes become chronic, long-lasting, painful and, most of all, unhealthy. We can gain control over the health of our stress response systems. Now let's look at what stress can do to the body; what healthy and sluggish stress response systems are; what makes a healthy one; and what we can do to strengthen our stress response system.

The Stress Response System

The connection between our nervous system (the brain, spinal cord and nerves) and our endocrine system (a group of glands distributed all over the body which secrete the hormones that help us to maintain a stable internal environment) is one of the tightest-knit relationships in the body. For years it was assumed they operated independently of each other, but recently it was found that the hypothalamus, a tiny mass of brain tissue, controls both neural (nervous system) and chemical reactions in the body. It is linked with neural pathways to the muscles for motor control, and it is also linked to the pituitary gland: the gland which has control over most of the hormone levels in the body. So neural reactions and chemical reactions can spring from the same source: the hypothalamus.

A Healthy Stress Response System

Let's look at an emergency reaction: for example a near miss on the highway. It begins when you see a car suddenly moving out of its lane in front of you. The

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hypothalamus gets the message that something threatening is happening, and a rapid chain of events takes place. Nervous system and chemical orders are immediately issued. The nerve messages go to muscles around the body for immediate action; milliseconds later you swerve to dodge the car in front of you. At the same time, the hypothalamus' chemicals go directly to the pituitary gland, which then whisks another set of chemicals into the blood stream. These chemical messengers target the adrenal glands. Adrenaline floods the bloodstream, reinforcing the initial nervous system responses. Now your heart is pounding, and your eyes are wide as you survey the road for other threats. The reaction is extreme but short-lived; a few minutes later you feel normal again.

The link between the pituitary gland and the adrenals forms the basis of a healthy stress response. The stress reaction races through the body with all the emergency effects on the organs: heart rate increases, blood pressure rises, sugar is released into the blood for quick energy, breathing becomes deeper and pupils dilate. But regardless of the threat, in a healthy stress response system the adrenal glands should stop releasing stress chemicals as soon as the threat is over. Unfortunately, this doesn't always happen.

A Sluggish Stress Response System

Some people have a stress-response system that doesn't work well. The chemical messages issued first from the hypothalamus, then by the pituitary gland, are slow to leave the brain and reach the adrenals. The stress response system takes longer to have an effect on the body,

decreasing the ability to respond quickly to threat. But in these individuals the stress reaction, once it takes hold, is tenacious. The after-effects linger much longer in the body than for someone who has a healthy stress response system. Furthermore, people who have a sluggish stress response system tend to trigger the stress response under less duress than others do. In other words, they will have more stress responses, more often, to less threatening stimuli, and those responses will have longer lasting effects on the body. This is a person who fumes in a long checkout line, who frets in heavy traffic and who

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consistently blows his/her top when the kids leave their bikes in the driveway. This is someone who may have a sluggish and over-reactive stress response.

What Makes a Healthy Stress Response System?

What determines the health of the pituitary-adrenal connection? Studies with animals reveal one reliable predictor for a sluggish stress response: lack of tactile stimulation, or touch. Under-stimulated animals have consistently slower, longer-lasting and more frequent stress responses than animals that had been regularly petted and fondled. This is called touch deprivation. Consider what this means for the average under-touched child or adult in our society; the majority of us have low-functioning, but longer lasting stress reactions, and they occur with unnecessary and



unhealthy frequency. The good news is that we can improve the health of our stress response systems with an abundance of healthy, nurturing touch.

Human beings have a tendency to get stuck in a stressful state. We can start to feel like it is normal to have big reactions to small problems. A hyper-reactive, sluggish stress response system can contribute to a body that frequently feels pain, suffers from headaches more than four times a year, has multiple injuries and is periodically incapacitated. These individuals are often caught in a continual emergency-response mode which significantly contributes to most common kinds of pain, injury and medical problems in our culture.

What Can We Do?

Stress is a normal healthy fact of life. Nothing we can do will ever permanently erase all of our stressors. In fact, stress often helps us to grow, learn and become stronger. When we choose de-stressing activities like weekly therapeutic massage, daily exercise, meditation, good nutrition, adequate sleep and other self-care modalities that support our stress response systems, we take important steps toward establishing that healthy dynamism between stress and non-stress states.

Authored by Ben Benjamin, PhD and Ruth Werner, LMT

5 Ways You Can Reduce Stress

Massage Therapy and Bodywork

In a fast-paced world we often need help relaxing. At least eighty million massage therapy sessions are given each year in the United States because body therapy done in a regular manner induces and enhances relaxation. Research has shown that massage diminishes muscle tension, and improves blood circulation by helping to balance the functions of the autonomic nervous system.

Daily Exercise If we exercise daily our lives become less stressful. Exercise increases blood circulation and acts as a physical discharge for built up tension in the body. It also increases production of endorphines and other hormones that help our body to function more optimally. A combination of aerobic activity, strength and stretching exercises provide the best exercise program.

A Nightly Bath A daily warm bath or hot tub relaxes the body by increasing the blood circulation.

Good Nutrition Eating a healthy diet balanced in protein, carbohydrates, and fats supports your body in rebuilding tissue with quality nutrients. The body's immune system is strengthened by well-balanced nutrition derived from the food you eat.

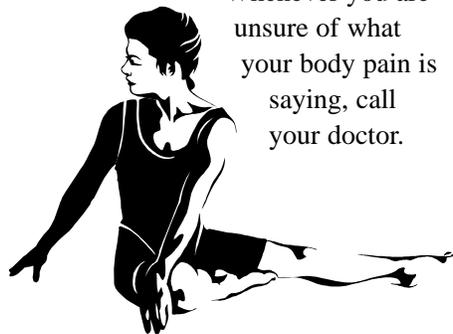
Laughter Laughter is food for the soul. In *Anatomy of an Illness*, Norman Cousins brings to light the power of laughter to promote physiological change. Sustained laughter relaxes the body, improves our state of mind and stimulates the production of various hormones that have a positive affect on our health.

PAIN IS A FRIENDLY SIGNAL

Pain is one of the most valuable feelings you can ever get. It is part of the language of your body. It tells you when something is wrong, and tells you how wrong it is by the degree of pain you experience. Brief pain can be a warning of worse things to come if you don't listen and respond. Intense or constant pains are loud, clear announcements to stop or else. Or else what? The body often contracts violently and hurts to prevent you from continued action that might tear a tendon, sprain a ligament, turn a minor bone fracture into a severe break, damage a nerve, or stop your heart. Pain is your lifesaver. When your body talks, listen. Learn to understand the messages that your body gives you. They may be precautionary messages like "Continue but slow down," or "Jack, take a break before you go on," "Mary, warm up some more," or "Harry, you're eighty-five. Give up tennis already." But on the other hand, your body's message might be urgently saying, "Jane, don't move, your leg is fractured," or "Sorry, Jim, you will have to lie in bed for three weeks because of what you did to your lower back with that piano moving."

When you have pain anywhere in your body, don't ignore it. Investigate it. Just use your head – if your pain is slight and goes away with a little rest, that's fine. But if it's severe or constantly recurring, get some help.

Whenever you are unsure of what your body pain is saying, call your doctor.



The motto I teach is: If it hurts, don't do it. It's better to be safe than incapacitated for years, or the rest of your life, because you would not listen. It's your body – no one else cares about it more than you do. Take care of it because it has to last you awhile. Remember, it's the only body you'll ever get.

Don't force yourself to exercise when you don't feel like it. Compulsive activity often leads to injury. If you don't really feel like exercising one day, it's a good idea to forget it and try again the next day. If you have a strong resistance to

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moving that day and you exercise, you will not be as alert, your reaction time will slow down, and the likelihood of getting hurt will increase. Even if you're in the middle of a game, or you've done your warm-up, or you've just gotten to the park and you are ready to jog, listen to yourself, respect yourself, stop and call it a day. Challenge the resistance only if it is small, if you recognize it as an old friend that needs a little push in order to feel great again. It's true that if you didn't exercise every time you felt a little resistant to it you might not ever do anything. There is a part of everyone that would prefer to just sit and vegetate in the security of inactivity. Obviously, this is not good and should be overcome. Inertia is a powerful force.

– Benjamin