

Stress Effects

By: Kim Lazarus, DC

What is Stress? Stress is the body's reaction to changes that affect physical, mental, and emotional well-being.

Where does stress come from? Our senses like sight, sound, taste, smell, and touch gather information from our environment and delivers information to our brain 24 hours a day, 365 days a year. Stress is the way our body responds to our environment.

The stress can actually change the shape of blood cells and make their function less effective to perform the job they are supposed to do. Stress can kill cells inside the body, which makes a person weaker and less able to fight off infection and stress related illnesses.

Examples of stress related illnesses include, but are not limited, to migraine headaches, muscle tension, high blood pressure, heart attack, cancer, and ulcers.

Stress initially weakens the immune system by reducing the number of T cells in the body. T cells are responsible for the body's defense system. Once the defense system has been compromised, the immune system begins to fail which can lead to illness. A compromised immune system paves the way for disease to enter the body.

When the brain is over-stimulated the body overproduces adrenaline. Adrenaline can be mood altering. Negative emotions get displayed and a person will become unhappy and fearful. Adrenaline is a chemical produced by the brain, which is a natural stimulant.

Adrenaline is responsible for alertness and also provides extra energy to fight off stressful situations. Adequate sleep may become problematic when over adrenalation will not calm itself.

Stress also causes an over-production of stomach acids that can destroy the lining of the stomach that can lead to ulcers.

Recent research suggests that when the body undergoes stress it may release a hormone known as cortisol. Cortisol can increase appetite and store fat. This may explain why some people gain weight when they get stressed while others tend to lose weight.

Stress responses can also shut down the digestive system and can cause chronic malnutrition. Chronic malnutrition will then make a person more prone to illness.

Stress along with alcohol, nicotine, and obesity are the highest ranked causes of disease in our country today.

What can be done to control stress? The good news is that the human body is designed to deal with stress and react to it. Stress can also be a positive reaction because it keeps us

alert and ready to avoid danger. Stress becomes negative when a person faces challenges without relief or relaxation. The result of being overworked with built up tension can lead to negative stress. Negative stress then becomes “distress” which can disturb the body’s internal balance, leading to physical conditions.

Research has shown that the mind is able to induce its own relaxation response, which will assist in the creation of T cells. By deliberately inducing the relaxation response, you can increase your T cell production and strengthen your immune system.

You don’t have to wait until you are stressed and about to burst to incorporate relaxation techniques into your lifestyle. They can be powerful prevention techniques as well.

Relaxation techniques could include any number of things, as long as they allow your mind and body to rest and regroup. Rock climbing can be relaxing for me because it completely takes my focus off of everything and forces me to concentrate on the next move I need to make to get up the rock.

Examples of stress reduction techniques include exercise, meditation, massage, yoga, saunas, and hot tubs. All of these can help calm the body, mind, and soul.

Exercise can balance out that over adrelenation I mentioned earlier. When the adrenaline gets balanced and more oxygen runs through your body, you will be able to think clearer and sleep better.

Meditation as well as yoga can quiet the mind. When the mind quiets down, clearer thinking can occur.

Massage stimulates endorphins, which will relax the nervous system. Massage works out the kinks in the muscles that get extremely tight and tense when stress is present.

Heat therapy such as saunas, hot tubs, hot baths, can be sedating. The temperature relaxes the nervous system and allows your body to feel less muscle tension.

In the greater scheme of things, your health should be your number one concern. Jobs, houses, motorhomes, and vacations are important but cannot be enjoyed without your health.

Now is an important time to take care of yourself. Begin incorporating stress management techniques now.

Kim Lazarus is a chiropractor and co-owner of the Los Alamos Fitness Center.

SPECIAL FREE SERVICES NOW BEING OFFERED

We at the Los Alamos Fitness Center care about you and, during these stressful times, would like to invite you to come experience some relaxation techniques. Weekdays,

beginning July 27th, we are offering free chair massage, foot soaks, facials, and spinal aromatherapy treatments from 5:00-7:00 pm. Several health practitioners from the community have volunteered their time to help all of you at the lab with stress relief by making their services available to you.

In addition to the relaxation treatments, we will be offering a free stretching for stress class at 6:30 pm on Tuesday and Thursday. These services are offered until further notice for free and you do not need to be a member of Los Alamos Fitness Center to participate.

As part of our regularly scheduled classes, we have several classes that will help you de-stress: Gentle Pilates, Tuesday at 9:00 am; Yoga, Tuesday and Thursday at noon; Fitness Yoga, Tuesday and Thursday at 5:30 pm; Yoga/Pilates Combination, Monday and Wednesday at 6:30 pm; and Stretch for Stress, Thursday at 9:00 am.

While the LANL Wellness Center is closed, we are offering LANL employees a special day rate of \$5. This unlimited pass includes full use of the weight room and cardio equipment, and includes all our classes and our infrared treatment sauna. We are also offering a special monthly rate to help you with your fitness needs while the Wellness Center is closed.

To view our facility and receive a list of our classes, go to our website at www.losalamosfitness.com or call us at 662-5232 for more information.