

THE BETTER HEALTH NEWS

STRESS AND THE HOLIDAY SEASON

STRESS

STRESS AND DISEASE

2

Stress increases during the holiday season. Many think that this is the reason flu season starts in the winter. Among other things, stress reduces your immune function. Stress also challenges the function of the adrenal gland. Traditional medicine does not usually recognize problems associated with the adrenal glands, unless it's something like Addison's disease—which is frank failure of the adrenal glands. Either the adrenal glands are functioning or they are not. Alternatively, in natural health care, adrenal function is something that is of interest.

continues (the resistance phase), the glands are large and functioning well. Eventually, if the stress continues, the glands reach the third stage, which is adrenal exhaustion.

STRESS AND NUTRITION

4

The adrenal glands are directly affected by stress. They are responsible for the "fight or flight" response. Hans Selye, MD, conducted some experiments creating stress in rats. The rats were made to tread water with their legs tied until they became exhausted and died. It's a little more extreme than dealing with the relatives over the holidays, but Selye learned a bit about adrenal function and adrenal stress.

Adrenal hyperfunction is when the adrenals are being challenged by stress and are adequately responding. People who have adrenal hyperfunction may or may not have symptoms. They are in Selye's "resistance phase". They may be prone to sports injuries or tendonitis. They may have insomnia, GI symptoms, a tendency toward food cravings, a tendency to skip meals, or have anxiety or heart palpitations. There may be other symptoms as well. Stress can trigger almost any disease or set of symptoms, or at least make any health problem worse. Sometimes they feel like they are really "on" and don't have any problems, but in reality they are a ticking time bomb.

TAKE A FREE HEALTH QUESTIONNAIRE

5

EXERCISE REDUCES STRESS & IMPROVES BRAIN POWER

6

Dr. Selye took the rats at various stages of their ordeal and examined their adrenal glands. He found that the adrenal glands responded to stress in three distinct stages. In the initial stage (the alarm reaction), the adrenal glands enlarge and the blood supply to them increases. As the stress

Adrenal hypofunction occurs when the adrenals are not adequately responding to stress and could possibly begin to fail. People who have adrenal hypofunction may suffer from allergies, asthma, back pain, knee pain, muscle tightness (sometimes so severe as to be called "fibromyalgia"), fatigue and depression. There may be other symptoms as well, stress can trigger almost any disease or set of symptoms, or at least make any health problem worse.

STRESS AND DISEASE

It is no secret that stress is linked to disease. Some argue that every disease is the result of stress. Most people think of stress as psychological stress, or worrying, but there are many kinds of stress. There is structural stress from subluxations or muscle spasm. There is chemical stress from a poor diet or from chemical exposure. There is the stress of having your immune system challenged by a microorganism. Additionally there is thermal stress from being exposed to extreme hot or extreme cold.

According to research appearing in *Epidemiology* (May 2001;11:345-349), psychological stress can increase your chance of coming down with a cold. Also, individuals with a negative outlook on life have an increased chance of contracting a cold.

Of course one reason for this is the fact that stress tends to drive us toward unhealthy behavior. According to research published in *Preventive Medicine* (January 2002;34:29-39), many people overeat as a reaction to stress. Also, researchers at the University of California, San Francisco have found a feedback system in rats that may explain the craving of so called "comfort foods" in people who are under stress. A steroid hormone, called corticosterone, is produced in rats as a response to stress. The human equivalent of this hormone is cortisol. The hormone causes rats to engage in pleasure seeking behavior 24 hours after stress. This behavior causes the rats to crave high calorie

food. In the rats' case, the food was sugar and lard. The hormone's effect on people is likely to make them crave chocolate, greasy burgers or other high-calorie food.

Stress has a negative effect on the immune system. A review of research spanning more than 40 years was published in *Psychological Bulletin* on July 4, 2004 and covered nearly 300 studies on stress. Chronic stress has the most negative effect on the body. The longer the stressor is present, the more it affects the body's ability to adapt, and the more likely that it will lead to a serious negative effect on health. Chronic stress attacks the immune system at the cellular level and then undermines the overall function of the immune system. Research published in *Psychosomatic Medicine* (March 1999;61:175-180) found that stress can actually intensify the symptoms of a cold or the flu.

Stress can also increase the chance of becoming a type II diabetic, according to research appearing in *Diabetes Care* (February 2000;23:197-201). The subjects consisted of 2,000 white adults, who were given a questionnaire about stressful events in their lives. Those with the highest number of stressful events, (serious stressors like the death of a spouse, end of a relationship, long term financial problems) were 60% more likely to have diabetes as those with fewer stressful life events.

WholeHealthWeb.com

Whole Health Web is a site designed to teach people about the value of natural health care.

Our goal is to inform you and to help you to start a conversation with your doctor about natural health care.

Most of our articles are about scientific research. We will also provide opinion pieces provided by natural health practitioners.

Visit us often, as we are continually adding new content

Low back pain can have its roots in stress suffered much earlier in life. This is according to research appearing in the *American Journal of Public Health* (October 2001;91:1671-1678). Psychological distress at age 23 increased by 2 ½ times the likelihood of low back pain at age 33.

Stress is linked to high blood pressure, heart disease and even wrinkles. Stress has even been linked to birth defects. Research appearing in *The Lancet* (September 9, 2000;356:875-880) indicates that stress during pregnancy can increase the incidence of birth defects by 80%. Severe stress, like the unexpected death of a child can increase the incidence of birth defects eight-fold.

Stress is cumulative. Stress from a poor diet will add to a stressful situation. If you control the stress that you can control, you will better handle the stress that you cannot control. Supplementation and chiropractic adjustments can also help to offset the physiologic harm from stress.

Got Health Questions? We've Got Answers!

Now more than ever before, it's important to take an active role in our own health care. But with the masses of information out there, how do you know what you can trust?

Whole Health Web offers free, reliable, scientific-based answers to the top health questions facing Americans today. Our articles and information are based on years of clinical research, experience and the most trusted sources for health information.

So, if you've got questions about your health, then look no further. Whole Health Web is your complete resource for reliable, accurate information.

[Click here](#) to visit [Whole Health Web](#) now to get access to a variety of free resources and information.



STRESS AND NUTRITION

Perhaps one of the most serious implications of stress may be in conjunction with a magnesium deficiency. Stress increases the need for magnesium. An article appearing in the *Journal of the American College of Nutrition* (1994;13(5):429-446) states that when stress causes the release of catecholamines and corticosteroids, an increased need for magnesium can occur. Stress and magnesium deficiency can lead to vasoconstriction and platelet aggregation. This can increase the risk of damage to the heart, cardiovascular disease, arrhythmias and even sudden cardiac death. Depleted magnesium levels due to stress can play a role in eclampsia in pregnant women. It can also be an aggravating factor in asthma.

Some nutrients have been studied, and have demonstrated beneficial effects for those under stress. Omega-3 fatty acids may be useful in mitigating stress. A prospective cohort study involving nearly 8,000 subjects was published in the *European Journal of Nutrition* (2007; 46 (6): 337-46) demonstrated omega-3 fatty acids may be of benefit for a variety of mental disorders including anxiety, depression and stress. Other research appearing in *Hypertension* (November 1, 2004;44(5):732-738) found that DHA supplementation reduced vasoconstriction due to psychological stressors.

Studies have also shown that vitamin C may increase tolerance to stress. An animal study appearing in the *Medical Tribune* (September 23, 1999;40(16):4) found that rats given vitamin C, when stressed, produced less corticosterone

(a stress hormone in rats) than rats not given vitamin C. The supplemented rats also had higher immune function, larger thymus glands and had their adrenal glands become less enlarged than rats not receiving vitamin C. Older research supported the idea that vitamin C (as sodium ascorbate) can be beneficial to allergy patients—and the mechanism may be through supporting the adrenal glands. A review article appearing in the *American Journal of Digestive Disorders* (September 1947;302-306) states that between one and two grams of sodium ascorbate per day is beneficial to allergy patients. The sodium ascorbate plays a role in adrenal function. One study involving 50 subjects with asthma, whole adrenal gland extract in conjunction with a high salt intake resulted in improvement of symptoms in 42 of the subjects. Sodium ascorbate supports both the adrenal gland and addresses the sodium/potassium imbalance caused by stress.

Research appearing in the *Journal of International Sports Nutrition* (2008; 5: 11) shows that phosphatidylserine may reduce stress hormone levels. The study was a small, double-blind crossover design, which found that with phosphatidylserine supplementation for 10 days, reduced exercise induced stress and reduced mean peak cortisol concentrations from moderately intensive exercise was achieved.

**The greatest
weapon against
stress is our
ability to
choose one
thought over
another.**

William James

HOW HEALTHY ARE YOU?

FINDING OUT IS EASY AS 1, 2, 3!

Right Now, You Can Take Advantage Of Our Free Online Health Assessment Tool.

JUST FOLLOW 1, 2, 3!

1. Visit our website to take the **FREE** online health assessment.
2. Print the results.
3. Bring your results to your natural health practitioner.

TAKE OUR FREE ONLINE HEALTH ASSESSMENT NOW!

Visit: www.WholeHealthWeb.com
And Take Your Free Health Assessment Now!



WholeHealthWeb.com

Visit often as we are continually adding new content

Disclaimer

All content found in this newsletter and on the WholeHealthWeb.com website, including: text, images, audio, or other formats were created for informational purposes only. The Content is not intended to be a substitute for professional medical advice, diagnosis, or treatment.

Always seek the advice of your physician or other qualified health provider with any questions you may have regarding a medical condition. Never disregard professional medical advice or delay in seeking it because of something you have read on this website. Links to educational content not created by WholeHealthWeb.com are taken at your own risk.

We are not responsible for the claims of external websites and education companies.

EXERCISE REDUCES STRESS & IMPROVES BRAIN POWER

Research appearing in the November 1999 issue of the *Annals of Behavioral Medicine* demonstrated the value exercise has for reducing stress. The subjects of the study were 135 college students. The study found that those who exercised regularly coped with stress better and had 37% fewer physical symptoms than those who did not exercise regularly. Sedentary students had 21% more anxiety than the students who exercised regularly.

Exercise can also improve the mood of depressed individuals, according to research appearing in the *Journal of Sports Medicine and Physical Fitness* (December 2001;41:539-545). Eighty volunteers took a mood test prior to an aerobics class, 52 of the subjects were determined to be in a depressed mood. The questionnaire was given

again, after the class. It was determined that participating in the class reduced fatigue, tension and feelings of anger.

Exercise even improves brain power according to a report presented at the annual meeting of the Society of Psychophysiological Research in Montreal, Canada October 18, 2001. The study looked at the thinking ability of 20 subjects between the ages of 18 and 24 after running for a half-hour. After the exercise the subjects were connected to an electroencephalogram (EEG), a device designed to measure brain waves. They were given computer tests before and after the exercise. The brain wave measurements showed that the decision making process was faster after the exercise.