

# Topic of the Week

Issue 3, July, 2009

WE CARE ABOUT YOUR HEALTH

## Chiropractic Decreases the Impact of Stress

Presented by: **Mark J. Glesener, DC**

Adjustments are commonly known to relieve musculoskeletal pain and tension. But did you know that they can also contribute to the recovery from the other dangerous side effects of stress - including high blood pressure and nervous system dysfunction - thus improving the health of all tissues and organs in the body?

### What Does Stress Do to Your Body?

Physician Dr. Hans Selye is one of the first to study the effects of stress in the human body. In his book *The Stress of Life*, Selye defines stress as the “non-specific response of the body to any demand placed upon it.”<sup>1</sup> Given that any demand can be either productive or destructive, he defines good stress as eustress and bad stress as distress.

When you perceive a threatening situation (distress), your nervous system becomes hyper-excitable, triggering the release of a multitude of stress hormones like adrenaline and cortisol. These hormones rouse your body for emergency action.

# STRESS

Presented by:

Fox Valley Chiropractic, Dr. Glesener, Fox Valley Chiropractic  
1750 East Main Street, Suite 60, St. Charles, IL 60174, (630) 377-8844  
www.drglesener.com,

The combined effect of nervous system hyperactivity and the hormonal cascade prepares your body to fight or run. Blood and energy supplies are redirected to your muscular system. Your heart beats faster, muscles tighten, blood pressure rises, breath quickens and senses become sharper. Any bodily systems not required for immediate protection from the threat are suppressed, such as the digestive and immune systems.

What if the stress in the environment is not actually life threatening, but you only imagine it as a serious threat?

When you're stressed by a busy schedule, heavy traffic or an upcoming job interview, your body reacts just as strongly to it as if you were facing mortal danger. Although each of these situations is not actually life threatening, you would probably still describe each as stressful. The body reacts by flooding itself with the same hormones that are released in a life-or-death situation.

If the stress response is necessary for your survival, it's considered appropriate. The physical effects subside once the danger is over. But if you're exposed to long term stressful situations, your stress response can change from helpful to harmful.

### Exercise of the Week

#### Back Extensions on Exercise Ball, Arms in Front (Superman Position)

*(Consult your chiropractor before engaging in this or any other exercise.)*

Difficulty: High

Lie on ball face down with feet on floor, legs straight. Feet together or apart (feet apart is easier). Back in resting, curled position. Hands positioned in front, arms straight and fingers touching floor.

The exercise: use low back muscles to bring body into a straight-spine position, shoulders back. Keep arms in front, palms facing each other, and thumbs up. Do not hyperextend low back. Stop when body is straight. Look at floor while keeping neck in a neutral position. Hold for 1-2 counts.

Repeat 5-10 repetitions.



Chronic stress disrupts nearly every system of your body. It leads to high blood pressure, increasing the risk of heart attack and stroke. It suppresses the immune system, leaving you prone to chronic illnesses. It also produces a very tense musculoskeletal system, leading to increased headaches, backaches and joints that are exposed to premature wear and tear (osteoarthritis).

## How Can Chiropractic Help?

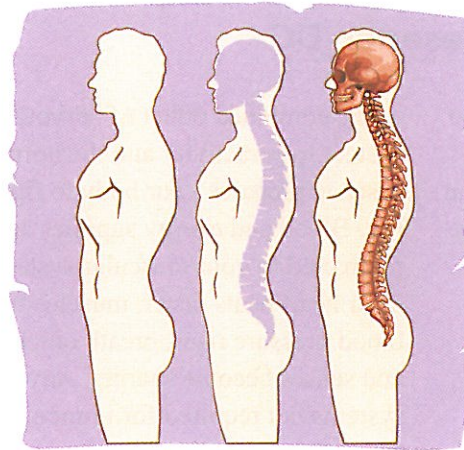
DD Palmer, the founder of chiropractic, said, "Life is the expression of tone. Tone is the normal degree of nerve tension... the cause of disease is any variation of tone -- nerves too tense or too slack."<sup>2</sup>

When you're under stress, it leads to an increased sympathetic tone in the nervous system. This response causes muscles to tighten, and as a result joints become compressed, restricted and painful. When it affects the joints of the spine, stress creates vertebral subluxations.

Another side effect of increased sympathetic tone is the constriction of blood vessels and nerves as they pass through muscles. This can contribute to dysfunction of the organs and tissues that these vessels supply.

When a chiropractic adjustment results in a popping noise, this signifies that an immediate decompression of the joint has just occurred. With less pressure in the joint, relative motion is improved, and any pain caused by the joint compression is decreased. With less restriction in it, the joint requires fewer muscles to move it. This generates relaxation in these tissues as well.

Chiropractors are neuromusculoskeletal specialists. For over 100 years, chiropractic adjustments have helped millions of patients to reduce body aches and pains. By correcting subluxations, your chiropractor also helps restore a more natural tone in the nervous system, resulting in an improved function in many organ systems of the body.<sup>3</sup>



One of the most dangerous side effects of chronic stress is the increase in blood pressure. According to the American Heart Association, high blood pressure is one of the main risk factors for cardiovascular disease (including heart attack and stroke), the leading cause of preventable death in the United States.<sup>4</sup> In a recent article, researchers showed that chiropractic adjustments applied to the first cervical vertebra (the atlas) were more effective in significantly reducing blood pressure when compared to medications and placebos.<sup>5</sup> Other studies have shown similar changes when applying chiropractic adjustments to the neck.<sup>6</sup>

So you can see that the chiropractic adjustment is an ideal tool to help reduce the pain and damage caused by stress.

## Quote of the Week

"We never know how far-reaching something we may think, say, or do today will affect the lives of millions tomorrow."

- B.J. Palmer, DC

For more health tips, visit online  
[www.citruspie.com](http://www.citruspie.com)



## References and Sources:

1. Selye, H. (1956). *The Stress of Life*. MacGraw
2. Palmer, D.D. (1910). *The Chiropractor's Adjuster (also called The Text-Book of the Science, Art and Philosophy of Chiropractic)*. Portland Printing House.
3. Bakris G, Dickholtz M, Meyer PM, Kravitz G, Avery E, Miller M, Brown J, Woodfield C, Bell B. Atlas Vertebra Realignment and Achievement of Arterial Pressure Goal in Hypertensive Patients: A Pilot Study. *Journal of Human Hypertension* 2007 (May); 21(5): 347-352.
4. Fujimoto T, Budgell B, Uchida S, Suzuki A, et al. Arterial tonometry in the measurement of the effects of innocuous mechanical stimulation of the neck on heart rate and blood pressure. *J Auton Nerv Sys* 1999; 75:109-115.
5. Lynch S & Boone WR. Somatovisceral responses to chiropractic adjustments. *JVSR* 2009

## Topic of the Week

newsletters are written and designed by  
**Brican Systems Corporation**  
exclusively for its chiropractic clients.

Writer/Editor: David Coyne

Writer: Dr. Christian Guenette, DC

Design: Elena Zhukova

Photos: Fred Goldstein

Disclaimer: Information contained in this Topic of the Week™ Newsletter is for educational and general purposes only and is designed to assist you in making informed decisions about your health. Any information contained herein is not intended to substitute advice from your physician or other healthcare professional.

Copyright 2009 Brican Systems Corporation

Since 1995

