

SYLLABUS

Title: The Stress Response Effect on Vertebral Subluxations

**Dates &
Locations:**

Instructor: Dr. Stuart Humberg, DC

CE Hours Requested: 4

I. COURSE OBJECTIVES

The stress response is a natural reaction by the body, against potentially harmful stimuli to enhance the chance for survival. Persistent activation of the stress response can cause changes to homeostatic mechanisms. The study of stress neurophysiology, in the evaluation of the manifestation of disease in the body, suggests that these chronic changes have detrimental effects on subcortical structures. Furthermore, there is much scientific support for the notion that chronic activation of supraspinal systems will lead to maladaptation of homeostatic mechanisms, causing the impairment of processes within the body, and ultimately leading to visceral disorders. The chiropractic profession for many years has alluded to chronic change of neurophysiological pathways as a potential explanation of visceral disorders, but the profession has typically described these in terms of somatovisceral or viscerosomatic reflex activity. Change in supraspinal neurophysiological efferent activity is increasingly being used to explain "stress" related disease. The chiropractic profession should consider investigating such stress responses by conducting spinal manipulative therapy trials that evaluate supraspinal effects of manipulation. Such research may help elucidate key mechanisms associated with the change of visceral disorders noted by some chiropractors following manipulative therapy.

II. COURSE OUTLINE

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| First Hour | Review of the body's natural stress response <ul style="list-style-type: none">a. Homeostatic mechanismsb. Neurophysiologyc. Manifestation of disease due to stress |
| Second Hour | Activation of supraspinal systems <ul style="list-style-type: none">a. Neuro & Physiological systemsb. Adaptation vs. Maladaptation |
| Third Hour | Stress & Visceral Systems <ul style="list-style-type: none">a. Normal processesb. Impaired processes |

Fourth Hour Stress Related Disease
 Supraspinal Neurophysiological activity
 Chronic effects
 The VSC's role