

# Stress Physiology and Defense Posture

**Every moment, our brain assesses the world around us and asks one question: “Am I Safe?”** If at any moment the brain determines that you are in danger, it sends out an alert to the body and the Fight-or-Flight Stress Response occurs. Mechanisms of survival are activated by the Brain Stem to prepare you to face the situation or run away, avoid harm or disconnect from your body. This response will occur during such times as: traumatic birth, abuse, trauma, mental and emotional stress, relationship issues, or chemical insults like drugs & medication. It occurs any time the brain determines “Danger!”

## **Here is how your body responds during the STRESS RESPONSE:**

Adrenalin is Released (Provides More Energy)  
Blood Sugar Elevates (Provides More Energy)  
Blood Pressure Rises (Provides More Oxygen to Muscles)  
Pulse Increases (Provides More Oxygen to Muscles)  
Muscles Tense (Provides Readiness for Action)  
Pupils Dilate (See More In Less Light)  
\*Immunity, Digestion and Sexual Function Diminish  
\*Metabolism slows down  
\*(These functions use lots of energy and are not necessary for immediate survival.)

These are all appropriate responses for survival. However, once the danger is gone and the stress is over, these body functions should return to a state of balance and the body should move into a state of *harmony*.

If these stressful events remain unresolved, we may live in a constant state of fear, anger, resentment, etc., putting greater stress on organs and effecting our mental/emotional state. The emotional brain center (Limbic System), then sends a message to the Brain Stem to maintain the Stress Response to keep us safe, just in case such a situation ever happens again.

Over time, this develops into what is called **Defense Posture**, evidenced by such observation as: hunched shoulders, forward head translation, tightness in the jaw, “sway” back and tight neck and shoulder muscles.

If you look at the list of the body’s response during stress physiology, it is immediately apparent that maintained over a long period of time, **these become our most common chronic ailments:**

Adrenalin/Cortisol is Released  
(Anxiety/Depression)  
Blood Sugar Elevates (Type II Diabetes)  
Blood Pressure Rises (Hypertension)  
Pulse Increases (Cardiac Arrhythmia)  
Muscles Tense (Fibromyalgia, Neck & Back Pain, Headaches, etc.)  
Pupils Dilate (Far-vision)  
Immune System Shuts Down (All immune related diseases)  
Digestion turns off (IBS, Indigestion, GERD, Constipation, etc.)  
Sexual Function Diminishes (Impotence & Infertility)

When the body and brain are locked in stress physiology and defense posture, we react as if the stress that caused it is still occurring, even though it may be decades in our past. **In this state, health and healing potential are limited, and our quality of life and experience of wellness greatly diminishes.** Not only does this affect us physically, it effects us emotionally and mentally as well.

Through the Levels of Network Chiropractic care, you can develop more advanced, appropriate responses to your life by turning the defense switch to “on” only when needed. **While not in defense, the body/mind can respond to its environment with greater ease, and employ those strategies which promote higher intelligence, growth, creativity and healing.**