

# STRESS AND YOUR CHOICES

Here are ways in which some key body systems react.

## 1 NERVOUS SYSTEM

When stressed — physically or psychologically — the body suddenly shifts its energy resources to fighting off the perceived threat. In what is known as the "fight or flight" response, the sympathetic nervous system signals the adrenal glands to release adrenaline and cortisol. These hormones make the heart beat faster, raise blood pressure, change the digestive process and boost glucose levels in the bloodstream. Once the crisis passes, body systems usually return to normal.

## 2 MUSCULOSKELETAL SYSTEM

Under stress, muscles tense up. The contraction of muscles for extended periods can trigger tension headaches, migraines and various musculoskeletal conditions.

## 3 RESPIRATORY SYSTEM

Stress can make you breathe harder and cause rapid breathing — or hyperventilation — which can bring on panic attacks in some people.

## 4 CARDIOVASCULAR SYSTEM

Acute stress — stress that is momentary, such as being stuck in traffic — causes an increase in heart rate and stronger contractions of the heart muscle. Blood vessels that direct blood to the large muscles and to the heart dilate, increasing the amount of blood pumped to these parts of the body. Repeated episodes of acute stress can cause inflammation in the coronary arteries, thought to lead to heart attack.

## 5 ENDOCRINE SYSTEM

Adrenal glands  
When the body is stressed, the brain sends signals from the hypothalamus, causing the adrenal cortex to produce cortisol and the adrenal medulla to produce epinephrine — sometimes called the "stress hormones."

### Liver

When cortisol and epinephrine are released, the liver produces more glucose, a blood sugar that would give you the energy for "fight or flight" in an emergency.

## 6 GASTROINTESTINAL SYSTEM

Esophagus  
Stress may prompt you to eat much more or much less than you usually do. If you eat more or different foods or increase your use of tobacco or alcohol, you may experience heartburn, or acid reflux.

### Stomach

Your stomach can react with "butterflies" or even nausea or pain. You may vomit if the stress is severe enough.

### Bowels

Stress can affect digestion and which nutrients your intestines absorb. It can also affect how quickly food moves through your body. You may find that you have either diarrhea or constipation.



## 7 REPRODUCTIVE SYSTEM

In men, excess amounts of cortisol, produced under stress, can affect the normal functioning of the reproductive system. Chronic stress can impair testosterone and sperm production and cause impotence.

In women stress can cause absent or irregular menstrual cycles or more-painful periods. It can also reduce sexual desire.

## Stress shuts & dumbs us down!

*Loss of creativity, awareness, energy & higher brain function!*

*Logic becomes based on a very limited and restrictive world-view but appears "logical" none the less!*

## Brain Wave States

Stress also affects the brain waves produced by the brain. These waves indicate what type of functioning the brain is able to do.

When we are in stress, we are in high beta, which is good for running from tigers, but not for building energy, creative thinking, or listening to intuition.

It has been shown that stress reduction & relaxation techniques move us more into Alpha & below. There we have better access to healing & creativity.

It has also been shown that the heart has a much more balanced rhythm pattern when we are in attitudes like appreciation & love.

Stress is a chronic condition in our society today & most people believe that is their only choice. Few have ever experienced the effects of a constantly lower level of stress. So we live in the logic and world-view of the stressed mind. That means we see the world as a place of fight or flight. Scarcity and punishment seem logical. "Dog eat dog" appears to be the way it "is".

Not only is the stress hard on our health, but it keeps us from being able to think outside the box that created the stress in the first place - a vicious cycle.

When thinking about MountainHeart School, it is best to get relaxed & into an Alpha brain state to allow insight, inspiration & creativity into your viewpoint, attitude & choices!

Reducing stress is the most important job of the Massage Therapist - and we do it through touch, visualization & verbal skills here at MountainHeart School.

