

Solutions for Reducing Stress
& Creating Optimal Health



What is stress?

Stress has become the number one malady of our time. The constant pressure associated with living in a fast-paced world has created an environment where nearly everyone is suffering from excessive stress.

Stress is a term used to describe the wear and tear the body experiences in reaction to everyday tensions and pressures. Change, illness, injury or career and lifestyle changes, are common causes of stress, however, it's the pressure and tension we feel in response to the little everyday hassles - like rush hour traffic, waiting in line, and too many emails - that do the most damage.

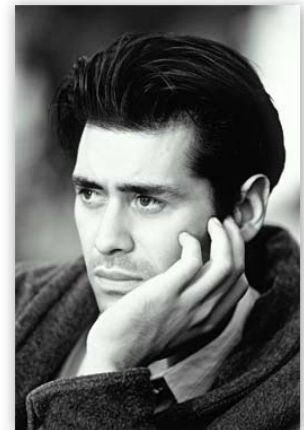
Stress is the body and mind's response to any pressure that disrupts its normal balance. It occurs when our perception of events doesn't meet our expectations and we are unable to manage our reaction. As a response, stress expresses itself as resistance, tension, strain or frustration that throws off our physiological and psychological equilibrium, keeping us out of sync. If our equilibrium is disturbed for long, the stress can become disabling.

Stress is often misunderstood. We look at outside events as the source of stress, but in fact stress is really caused by our emotional reactions to events. The stress we experience in today's world often goes unnoticed. Many people have simply adapted to stress in an unhealthy way, resigned to thinking it's "just the way it is". Unfortunately unmanaged stress has created a pandemic of low-grade anxiety and depression.

How does stress affect health?

Stress affects people physically, mentally and emotionally. According to the *American Institute of Stress*, up to 90% of all health problems are related to stress. Too much stress can contribute to and agitate many health problems including heart disease, high blood pressure, stroke, depression and sleep disorders. Additional studies confirm the debilitating effects of stress on our health:

- Three 10-year studies concluded that emotional stress was more predictive of death from cancer and cardiovascular disease than smoking. People who were unable to effectively manage their stress had a 40% higher death rate than non-stressed individuals.
- A *Harvard Medical School* study of 1,623 heart attack survivors found that when subjects got angry during emotional conflicts, their risk of subsequent heart attacks was more than double that of those that remained calm.
- A 20-year study of over 1,700 older men conducted by the *Harvard School of Public Health* found that worry about social conditions, health and personal finances all significantly increased the risk of coronary heart disease.
- Over one-half of heart disease cases are not explained by the standard risk factors, such as high cholesterol, smoking or sedentary lifestyle.
- According to a *Mayo Clinic* study of individuals with heart disease, psychological stress was the strongest predictor of future cardiac events, such as cardiac death, cardiac arrest and heart attacks.



We look at outside events as the source of stress, but in fact stress is really caused by our emotional reactions to events.

To find out more about HeartMath solutions to stress and other related e-books click here to sign up now.

How stressed are you?

Everyone responds to stress differently. Take this quick test to see if there are areas in your life where you are experiencing stress.

- I feel overly tired or fatigued.
- I often am nervous, anxious or depressed.
- I feel driven, hyperactive, and restless.
- I tend to make snap decisions but with errors.
- I have sleep problems.
- I have repeated headaches or minor aches and pains.
- I worry about job security, financial obligations or relationships.

What can I do about it?

The first step is to understand how stress works. It's not the events or situations that do the harm; it's how you respond to those events. More precisely, it's how you feel about them that determines whether you become stressed or not.



Emotions, or feelings, have a powerful impact on the human body. Emotions like frustration, insecurity and depressing feelings are stressful and inhibit optimal health. Positive emotions like appreciation, care, and love not only feel good, they promote health, performance and well being.

HeartMath's research has shown when you learn how to intentionally shift to a positive emotion, heart rhythms immediately change. A shift in heart rhythms may not seem important but in fact it creates a favorable cascade of neural, hormonal and biochemical events that benefit the entire body. The stress-reducing effects are both immediate and long lasting. The Freeze-Framer Learning System is designed to help you learn how to change your emotional state and heart rhythms to reduce your stress levels and revitalize your entire body.

How does it work?

When you're stressed, your body is out of sync. Typical negative emotions we feel when stressed—like anger, frustration, anxiety and worry—lead to increased disorder in the heart's rhythms and in the nervous system. In contrast, positive emotions like joy, appreciation, care and kindness create harmony in the heart's rhythms and the nervous system. Other bodily systems sync up to this rhythm which scientists call *coherence*. Because coherence leads to more mental clarity, creativity and better problem solving abilities, it's easier to find solutions and better ways of handling the stressful situation—and, feel better.

HeartMath's research has shown when you learn how to intentionally shift to a positive emotion, heart rhythms immediately change.

Research at the Institute of HeartMath has shown that emotions are reflected in the beat-to-beat changes in the heart's rhythms. This is called heart rate variability, or HRV. The analysis of HRV is recognized as a powerful, non-invasive way to measure nervous system dynamics. New clinical research identifies HRV as a key indicator of preventable stress and shows a relationship to a wide range of health problems.

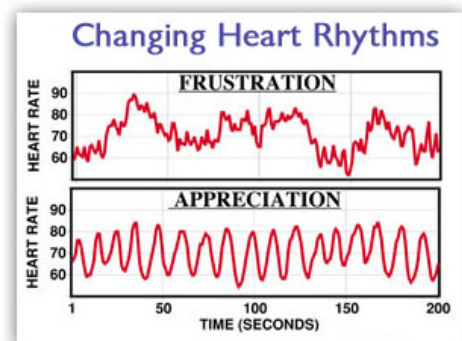


Freeze-Framer 2.0 displays heart coherence

How can I create and gain the physiological coherence needed to reduce stress?

The Freeze-Framer® Learning System uses advanced technology to provide an interactive tool to use in your daily life to create new levels of coherence and reduce the effects of stress. This complete system consists of an easy-to-use finger sensor and software that displays your heart rhythms (HRV), offers games, a tutorial and much more. The Freeze-Framer has been specially designed to teach you how to bring your emotions, mind and body into greater coherence. You'll also learn the Quick Coherence® tool, a simple, easy way to interrupt the stress response and quickly reduce the impact stress has on your health, performance, and overall well being.

With your Freeze-Framer you can see your heart rhythm patterns in real time on the computer screen. When you apply the Quick Coherence tool you can see the changes in your heart rhythm (HRV) patterns. By correlating the patterns on the screen with a calm internal feeling, you learn to find and maintain physiological coherence. You learn self-control of emotions, which helps reduce the symptoms of stress. Seeing your heart rhythms and a coherence score in real time can accelerate your progress. You learn how to quickly change your reactions to stress, increase your energy and improve your overall health and well-being.



Regular use of the HeartMath System has resulted in significant stress reduction benefits by people with ADD/ADHD, anger, anxiety and panic disorders, arrhythmias, asthma, chronic fatigue, chronic pain, depression, diabetes, digestive disorders, hypertension, and sleep disorders.

"The Freeze-Framer is a revolutionary product that helps me deal with accumulated stress through short tension busting 'inner workouts' that I look forward to everyday."

--Barnet Bain, Hollywood movie producer,
What Dreams May Come, CEO of Metafilms

Frequently Asked Questions

1. Question: There are a lot of stress management programs and products available. What's different about the HeartMath approach?

Answer: Most stress management programs and products deal with the "effects" of stress not with the cause. Many programs focus on the importance of watching our diets, exercising more, relaxation techniques and so on. These approaches can help but are most often applied after the fact—to get over stress not to prevent it.

With HeartMath techniques and the Freeze-Framer Learning System you address the causes of stress, negative emotions and nervous system chaos. It helps you re-train your mind and body to respond differently to potentially stressful situations. The System is already being used successfully by executives and managers in Fortune 100 companies, the military, health care professionals and educators and it's based on solid scientific research.



On-Demand, Real-Time Stress Management

2. Question: Some people seem to thrive on stress and think stress is good because it motivates us. What are your thoughts on this?

Answer: Stress can be a motivator, up to a point. Without challenges we wouldn't grow, learn new things or reach beyond our limits and comfort zones. However, studies have clearly shown that at a certain point—long before most people realize it—stress begins to diminish our performance and negatively impact our health. Statistics clearly show that chronic stress—not the everyday stress associated with motivating us to meet a challenge—has become highly prevalent throughout the world, especially in Western industrialized nations. It's damaging the lives of hundreds of millions of people, taking a heavy toll on society as a whole.

3. Question: I'm recovering from a serious health problem. It's causing me a lot of stress and I know that stress is bad for my health and recovery. How can the Freeze-Framer help me deal with the stress I'm feeling?



Answer: Many people recovering from an illness do experience a considerable amount of stress in the form of worry, anxiety, boredom and dealing with change. The Freeze-Framer can help because it teaches you how to synchronize your nervous system while at the same time learning how to regulate your emotions. This reduces a lot of unnecessary stress, which promotes healing. Using it for 15 to 30 minutes

a day will help you create a more calm and balanced state of being and can become an important part of overcoming the stress associated with disease.

4. Question: When using the Freeze-Framer how will I know it's working?

Answer: As you learn how to become more coherent you'll feel better right away. That's because when you're stressed, your body is out of synch. Typical negative emotions we feel when stressed, like anger, frustration, anxiety and worry lead to increased disorder in the heart's rhythms and in the nervous system and we can certainly feel that. In contrast, positive emotions create harmony in the heart's rhythm and the nervous system and when that happens it's easy to tell the difference. You can feel the stress going away, being replaced with a more calm and clear state.

How and When to Use the Freeze-Framer

The Freeze-Framer works on almost any PC computer. It's easy to install and the Quick Start Guide, Help Menu and comprehensive, multi-media Tutorial make it easy to understand and use. It's as simple as placing your index finger on the sensor, opening the program and clicking the Start button with your cursor.



You can observe your changing heart rhythms, play one of the Freeze-Framer's games and practice the Quick Coherence technique to improve your coherence score. You can also save your session for review later and compare sessions to track your progress.

It is suggested that you use it for 15 to 30 minutes a day in one or two sessions.

- You can use it at the office when you need a break, before or after meetings, or before engaging in a task that requires extra mental clarity and creativity.
- Use it during air or train travel to reduce travel stress.
- Use it before going to bed to release the stress has built up during your day, or use it in the morning to help set the tone for the day.
- If you have had an especially stressful episode it's a great way to get back into balance fast.
- Children have stress too and the Freeze-Framer can help them learn how to better manage their emotions.

There are so many uses for the Freeze-Framer you will be certain to find applications that are right for you and your lifestyle.

"The Freeze-Framer has helped me better appreciate all the good things I have. It has reduced my stress level, lowered my blood pressure, and helped me balance work with the rest of my life. It has also helped me make better business decisions."

--Mark Dubovoy
Leapfrog Ventures (venture capital)

To stay up to date with the latest stress solutions click here to sign up.

Glossary of Terms

Cardiac Coherence—A mode of cardiac function in which the heart’s rhythmic and electrical output is highly ordered. HeartMath research has shown that the positive emotions such as love, care, and appreciation increase coherence in the heart’s rhythmic beating patterns. During states of cardiac coherence, brain wave patterns have been shown to entrain with heart rate variability patterns; in addition, nervous system balance and immune function are enhanced. Overall, the body functions with increased harmony and efficiency.

Coherence—Logical connectedness, internal order, or harmony among the components of a system. This term can also refer to the tendency toward increased order in the informational content of a system or in the information flow between systems. In physics, two or more waveforms that are phase-locked together (so that their energy is constructive) are described as coherent. Coherence can also be attributed to a single waveform, in which case it denotes an ordered or constructive distribution of power content. Recently, there has been a growing scientific interest in coherence in living systems. When a system is coherent, virtually no energy is wasted, because of the internal synchronization among the parts. In organizations, increased coherence enables the emergence of new levels of creativity, cooperation, productivity, and quality at all levels.

Core Heart Feelings—Psychological qualities commonly associated with the heart. These qualities represent some of the most beneficial and productive human values and traits. There are many core heart feelings, including love, compassion, nonjudgment, courage, patience, forgiveness, appreciation, and care.

Emotion—A strong feeling. Emotions include any of the various complex reactions with both mental and physical manifestations—examples include love, joy, sorrow, and anger. Emotional energy is neutral, attaching itself to positive or negative thoughts to create emotions.

Emotional Management—The degree of ability one has to consciously control emotional responses.

Heart—A hollow, muscular organ in vertebrates that keeps the blood in circulation throughout the body by means of its rhythmic contractions and relaxations. The body’s central and most powerful energy generator and rhythmic oscillator, the heart is a complex, self-organized information-processing system with its own functional “little brain” that continually transmits neural, hormonal, rhythmic, and pressure messages to the brain.

Heart Intelligence—A term coined to express the concept of the heart as an intelligent system with the power to bring both the emotional and mental systems into balance and coherence.

Heart Rate Variability (HRV)—The normally occurring beat-to-beat changes in heart rate. Analysis of HRV is an important tool used to assess the function and

balance of the autonomic nervous system. HRV is considered a key indicator of aging, cardiac health, and overall well-being.

Perception—The act or faculty of apprehending by means of the senses; the way in which an individual views a situation or event. How we perceive an event or an issue underlies how we think, feel, and react to that event or issue. Our level of awareness determines both our initial perception of an event and our ability to extract meaning from the available data. Research is showing that when the mind's logic and intellect are harmoniously integrated with the heart's intuitive intelligence, our perception of situations often changes significantly, offering wider perspective and new possibilities.

Stress—Pressure, strain, or a sense of inner turmoil resulting from our perception and reactions to events or conditions. A state of negative emotional arousal, usually associated with feelings of discomfort or anxiety that we attribute to our circumstances or situation.

"Freeze-Framer has been a successful method for managing work related stress. In addition, I've also noticed that it's easier for me to be removed or be objective when it comes to politics in the organization."

-Mike Guerra
Sergeant, Atherton Police Department

Additional HeartMath Resources

Books:

The HeartMath Solution
Overcoming Emotional Chaos
Transforming Anger
The Inside Story

For more information about how you can learn to effectively stop the negative effects stress is having on your life and to order your Freeze-Framer learning system or other HeartMath products contact:

HeartMath LLC
14700 West Park Avenue
Boulder Creek, California 95006 USA
www.heartmath.com
800-450-9111

Sign up for HeartMath e-newsletter.

HeartMath is a registered trademark of Institute of HeartMath, Freezer-Framer is a registered trademark of Quantum Intech, Inc and Quick Coherence is a trademark of Doc Childre.