

# Heart Coherence

## How do emotions affect the heart?

The emotions we typically feel when stressed - like anxiety, worry, anger and frustration, cause the body to assume its survival is threatened. The body's fight or flight response is activated causing adrenaline and cortisol to be released into the bloodstream. This emergency response happens frequently, and in many people becomes chronic in response to everyday stressful thoughts and feelings. This ongoing feeling of threat leads to increased disorder in the heart's rhythms and in the nervous system. As a result, our heart's beating rhythm (heart rate variability) becomes chaotic.



## How does the heart affect the rest of the system?

All the operating systems of the body - circulatory, nervous, respiratory, digestive, excretory, etc. - are entrained or modulated by our heart action. If we're frequently or chronically stressed, our overall functional level is reduced. If we're coherent in heart and calm of mind, our overall level of function is enhanced. Since the heart's electromagnetic field far out-powers and out-ranges that of the brain or any other body system and since calming the heart calms all other body systems, it makes sense to learn a technique to bring coherence to the heart.

## How does stress affect the body?

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 or not you become stressed. 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.

## Heart rate variability as an indicator of overall health

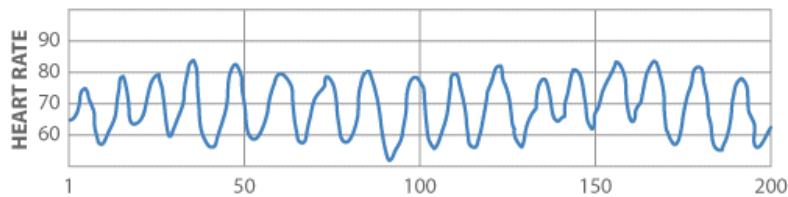
The beat-to-beat change in your heart's rate is called heart rate variability (HRV). Cardiologists now recognize HRV as an indicator of overall health and endurance because it is a window into nervous system function. Nervous system imbalances are linked to many conditions, including diabetes, chronic fatigue, high blood pressure, migraine headaches, Alzheimer's, HIV and many more.

Interestingly, researchers have learned that emotions have a profound impact on your HRV. When you're stressed, the heart rhythm pattern looks like this:



Scientists call this chaotic pattern an incoherent rhythm. This rhythm indicates that the two branches of the nervous system -- sympathetic and parasympathetic -- are out of sync. Your system doesn't know whether to speed up or slow down. And, just as driving your car with one foot on the brake and the other on the accelerator pedal is not good for your car's engine and wastes fuel, a chronically chaotic heart rhythm is not good for you. You age prematurely.

On the other hand, when you feel positive emotions, this creates a smooth or coherent heart rhythm that looks like this:



A coherent pattern means the two branches of the nervous system are in sync, allowing the heart to speed up and slow down in a smooth, efficient pattern.

Heart rhythm patterns have a profound impact on brain function, which can be measured in the cortex.

Incoherent heart rhythm = cortical inhibition

Coherent heart rhythm = cortical facilitation

Creating effective stress reduction from coherent physiology requires a whole systems approach - mind-body-heart-emotion.

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 following Heart Coherence technique is designed to help you learn how to change your emotional state and heart rhythms to reduce your stress levels and in turn, revitalize your entire body.

### **The steps to Heart Coherence**

Try this simple technique for about 2 - 3 minutes or as long as feels good for you.

1. Place one hand over the other on the centre of your chest, at the level of your heart.
2. Focus your attention on this area.
3. Slowly and gently, breathe in, as you do, imagine the air entering in through your heart, and then breathe out whilst imagining the air leaving through your heart.

You may notice a relaxing effect as your breathing slows down. You may also notice a slower heart rate. Some people experience this as a calm feeling; others find it energizing.

This change occurs because breathing modulates the nervous system. By making a slight adjustment in how you breathe, you can start to bring order to the nervous system, which in turn sends a more coherent heart rhythm signal back to the brain. The heart and nervous system are now working more efficiently together. This is one reason why breathing techniques are effective in reducing stress. Just remembering to breathe deeply when you're experiencing stress will reduce your stress. By paying attention to your heart and your breathing, you shift the energy down from your head and you start to disengage from the mental and emotional response to the stress. But you don't want to stop there.

Emotions play a big role in stress reduction and overall health. They impact powerfully on your hormonal system. Emotions also have a dramatic impact on heart rhythms. For these reasons it is important to include the next step to Heart Coherence.

4. Make a sincere effort to activate a positive feeling.

While any positive, heartfelt emotion will work, the easiest one for most people to use is appreciation. Feeling appreciation for a person, place or quality in your life is all it takes to make the emotional and hormonal shift. Although it might not always be the easiest emotion to tune into, especially if you are not feeling at your best, it is a vital part of the process. It's important to not just visualize or think about appreciation, but to feel it. You could start by thinking about something or someone you appreciate, and then bring that feeling down into the heart to create a heartfelt emotion. Anything you sincerely appreciate will work - a favourite pet, a wonderful holiday experience, those you love, or a recent pleasing event are a few examples that work for most people. It becomes easier to access these feelings with practice. It's the shift in feelings that sustains nervous system harmony.

When you put the two steps together you change how two key systems are responding to stressful situations - nervous system and hormonal. The result is physiological coherence (nervous system, heart, hormonal, brain function) and psychological coherence (emotions, attitude and mood). The resulting coherent internal state supports good health and overall well-being.

Summary of Heart Coherence steps:

1. Place both hands over the centre of your chest.
2. Shift your focus to the area around your heart
3. Breathe in through your heart and out through your heart.
4. Make a sincere effort to activate a positive feeling.

Why not take a moment to try it right now and notice the changes. With practice it becomes easier to shift your state to one of greater physical and emotional coherence.

## Heart Coherence in Action

Use these four steps any time to replace a stress-producing, emotionally draining reaction with a new response or action that is healthier and more energy efficient. With practice, you can learn to change your physiology in just seconds!

You don't have to wait until you're stressed to gain the benefits of coherence. You have to breathe anyway! So why not make a slight adjustment and give your body an energy boost on your next breath?

Practicing Heart Coherence will anchor feelings of appreciation, buoyancy and emotional stability, which can increase the probability of carrying such feelings into and throughout the day; this builds resilience and reduces the likelihood of becoming drained by life's daily stressful events.

## Applications

By using this quick and easy way to coherence first thing in the morning before negative thoughts, worries, anxieties or even 'useful' plans start to engage the mind you can set the emotional tone for the day.

Likewise, at the end of the day, a quick shift to coherence can help you unwind, rebalance and let go of worries, concerns and negative feelings that have accumulated throughout the day.

Focusing on feelings of appreciation before going to bed often leads to more peaceful and rejuvenating sleep and reduces the carry-over of negative thoughts and emotions into the following day. Creating this kind of internal environment prepares the physiological, mental and emotional systems to more fully derive the regenerative benefits of sleep.

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