

# HeartMath Solution for Better Sleep

Integrating emWave® and  
Inner Balance™ Technologies



 HeartMath®

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Rollin McCraty, Ph.D.

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# *HeartMath Solution for Better Sleep*

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*In this booklet "emWave" refers to emWave PSR, emWave2, emWave Desktop or emWave Pro and "Inner Balance" refers to heart coherence feedback technology for iOS devices.*

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# HeartMath Solution for Better Sleep

## Introduction

Welcome to emWave and Inner Balance Solution for Better Sleep. This Five Step Program is designed to help you reset your response to stress and your body's rhythms so you can fall asleep more easily, sleep more soundly, and wake up more refreshed.

You will use HeartMath's heart coherence feedback technology (emWave PSR, emWave2, emWave Desktop, emWave Pro or Inner Balance for iOS) with this Better Sleep Guide to establish new mental, emotional and physiological rhythms that can dramatically improve sleep.



Mental or emotional stress is often an overlooked cause of sleep problems. Yet stress is a key factor in sleeplessness. The techniques in this Better Sleep Guide were developed by HeartMath, a world leader in improving health and performance while reducing stress. Practicing these scientifically-validated techniques with regular use of your emWave or Inner Balance can help you reduce stress, reset your response to stress, enjoy better sleep, and improve your life.



“It has now been about three and a half weeks that I have been enjoying about 6 hours of non-medicated sleep per night. What a difference this HeartMath program has made!! Sometimes I do wake up in the middle of the night, in which case I just repeat the before-bed process. At first I used the emWave for just five minutes before bed, now I’m finding that 15-20 minutes goes by with little effort, and then sleep just comes.”

**Natalie E., Singer, Songwriter, Performer**

“I have PTSD and have had nightmares almost every night all my life. The first time I used emWave right before sleep, I had my first night’s sleep with NO nightmares, and it still works every night! Also, having once been very articulate, I was very frustrated by memory problems affecting word recall. I struggled to find even simple every day words as I stammered, felt stupid and was often unable to express what I wanted. A few days after using emWave daily, I actually found myself discussing some fairly deep, abstract subjects fluently and effortlessly with NO word recall problem! It’s also helped me with anxiety – it helps me calm before difficult tasks, calm after upsets, and get clearer to make important decisions. emWave has improved my life in many ways!”

**Becky F., Psychiatric Social Worker**

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## Introduction

Getting a good night's sleep is important for many reasons, one of which is it replenishes the energy that you draw upon to handle your daily challenges and responsibilities. We all wake up with a certain amount of personal energy. Basically, we are an “energy system” that has to both expend and renew energy to remain healthy and function well. You can think of this as how much energy you have stored up in an inner battery. This inner battery supplies the energy you have available to expend not only physically, but also mentally and emotionally.

When you have a fully charged inner battery, you have a greater capacity to stay in charge of yourself and a greater ability to remain calm, think clearly and be in control of your emotions so you don't overreact. In other words, you can more easily “roll with the punches” and flow through challenges that come your way, rather than getting stressed out, which only drains your energy reserves.

One of the most important ways to renew energy or recharge your inner battery is to get enough uninterrupted sleep. Sleep is one of the most basic ways the body renews its energy levels. Another essential thing you can do to help not waste your energy is learn to more intelligently self-regulate your emotions and stress reactions. This will increase your ability to maintain mental focus and clarity and your emotional composure, especially in challenging situations.

## Coherence

Coherence is a term used to describe when your internal physiology is in sync and balanced, which is essential for renewing and sustaining your energy. In a coherent state, your heart, mind, emotions and nervous system, as well as your hormonal and immune systems, are operating in a well-coordinated and optimal

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way. It's like driving a well maintained car; you get a smooth ride, have more available power and save fuel at the same time.

Coherence is a state that you can generate that gives you a very real advantage in your health and performance. You will learn how to generate coherence with your emWave or Inner Balance heart rhythm coherence technology and the HeartMath techniques that you will learn in this Better Sleep Guide.

Research has shown that generating coherence is directly linked to better sleep, significantly less fatigue and exhaustion, and improved mental abilities. When you are coherent, you not only save energy, you are better able to be in charge of yourself and make better decisions. Simply said, the more coherence you maintain, the more energy you build up in your system and store in your inner battery. You have more reserves to draw on — more fuel in your tank — when you need it. Being in a coherent state is like having a rapid charger connected to your inner battery.

It's important to keep in mind that your energy can vary greatly from day to day. On low energy days, it's especially important to remember to practice the skills in this Better Sleep Guide to increase coherence, conserve energy and reset your system for a better night's sleep.







## Part 1

### Why It Can Be Harder to Fall Asleep or Stay Asleep in Today's World

If you are having trouble getting a good night's sleep you are not alone. Surveys show that millions of people are experiencing frequent sleep pattern disruptions and fatigue. The U.S. Department of Health and Human Services reports that about 60 million Americans suffer from insomnia each year. Insomnia is defined as "difficulty initiating or maintaining sleep, or both." The National Sleep Foundation reports that disordered sleep (difficulty falling asleep, light sleep or non-restorative sleep for several nights a week or more) now affects nearly two-thirds of American adults—and that this disordered sleep epidemic *stems most commonly from stress*. In fact it is well-known that one of the first symptoms of too much stress is sleep disruption.

Sleeplessness affects all age groups, but more than half of older Americans have trouble sleeping and think that it's just part of aging. It's not. "Sleep problems in the elderly are not a normal part of aging," according to Dr. Julie Gammack, assistant professor of geriatrics at Saint Louis University. But sleeplessness "contributes to an increased risk of accidents, falls and chronic fatigue." Children and teens, too, are having trouble sleeping these days. In fact, difficulty falling asleep is the most common complaint among adolescents.

While there are many causes for sleeplessness and many tips to improve sleep, unless stress overload is adequately addressed, other remedies may not be that effective. Stressors contributing to sleeplessness range across a wide array of issues, such as major life changes, job or school stress, financial challenges, relationship

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problems, health concerns, anxiety, worry or depression.

Sleeplessness often creates a vicious cycle. You wake up during the night, realize you are wide awake when you should be sleeping, and then you become anxious. Anxiety causes adrenaline to flood the system, and adrenaline prompts the mind or body into action—the opposite of what's needed to sleep effectively.



If you're reading this Better Sleep Guide, you probably have already tried some of the common practical tips\* for better sleep, which include the following:

- Avoid caffeine, sugar, alcohol or strenuous exercise at least 3 hours before retiring
- Avoid stimulating activity and stimulating TV shows at least 1 hour before retiring
- Don't sleep with your phone, computer or tablet near your head
- Follow a consistent, calming bedtime routine
- Make sure window shades are closed so the room is dark
- Try to get up the same time each day
- Try light exercise (not aerobic) such as stretching or a casual walk before sleep
- Ask your health care provider to recommend natural sleep aids and supplements

\*See the Appendix for more tips



You may already be following these common sense tips, but still find restful sleep elusive. It's time to focus on the most common cause of sleeplessness: **daily stress.**

Stress has been mentioned a number of times, and for good reason. When we look deeper at what stress is, we see that stress is almost always associated with an energy draining feeling or emotion. It can be a feeling that you don't have enough time, leading to frustration or angst, or a feeling of impatience because things are not going the way you want, or a feeling of not being in control. It's important to realize that how you feel throughout the day affects how you sleep at night. This is because emotions (even if we are not always aware of them) affect the activity in our nervous system and are one of the primary factors that activate the release of hormones.

It's no surprise that chronic insomnia is associated with elevated levels of the stress hormone cortisol. Even a few minutes of being frustrated or irritated can significantly increase the release of cortisol, and once released, it stays active in the body for many hours.

If you allow stress related hormonal releases to build in your system during the day, it throws off your body's natural metabolic and

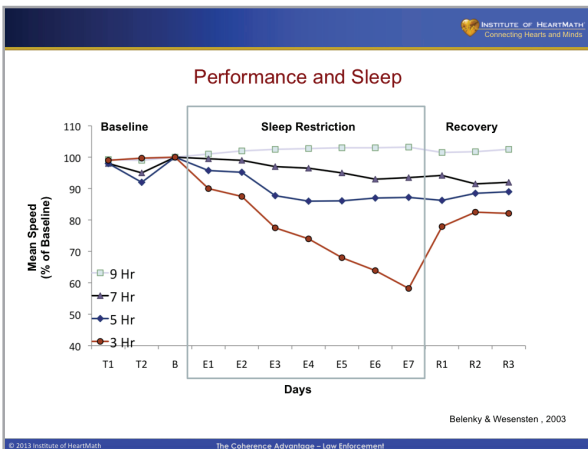
**A Note about prescription sleep medication:**

Physicians today are prescribing more sleeping pills than ever before. Sales of insomnia prescription drugs were nearly \$3B/ year in the USA in 2011.

But prescription sleeping pills can be addictive and can have significant gastrointestinal, neurological and psychological side-effects. Dr. Paul Rosch, Chairman of the Board of the American Institute of Stress, says prescription sleeping pills are also associated with a 44% higher risk of developing sinusitis, pharyngitis, upper respiratory tract infections, influenza, herpes, and other viral infections. Furthermore, many people find that after a while sleeping pills aren't working even if they increase the dose; they still wake up in the middle of the night tossing and turning with worry, anxiety, judgments or blame and can't turn their mind off.

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nervous system rhythms, which disrupts your sleep rhythms. A study in *Sleep Medicine Review* found that insomniacs are at greater risk for chronic anxiety and depression and recommends that insomniacs take steps to decrease their overall level of emotional arousal during the day to improve their nighttime sleep. Otherwise the effects of stressful emotions accumulate during the day and they take it to bed with them. The body's systems just can't shut down, leading to difficulty in sleeping or staying asleep.



This graph shows the effects of not getting enough sleep over a one-week period. A study at the Walter Reed Army Research Institute tested the reaction times of groups of participants who got nine, seven, five or three hours of sleep each night over a week. The performance of the group that got nine hours in bed gradually increased during the week. The graph shows what happened with the seven, five and three hour groups. The study clearly shows that the fewer hours of sleep, the lower the performance. Researchers found that their performance still hadn't recovered after three nights of having eight hours to sleep. They found that it took them two weeks to recover. Yet, when asked about their perception of their performance, they thought they were good to go and performing normally. They were not aware of their impairment.

The impact of not getting enough sleep was shown in a study conducted at the Walter Reed Army Research Institute (see graph above). The study clearly shows that the fewer hours of sleep, the lower the performance. When the study was first designed,



the researchers thought that following the study three nights of sleep would be enough time for the participants to recover their energy and return to normal functioning levels. They were wrong. They found that it took them two weeks to recover! What was especially concerning was that when the researchers asked the participants about their perception of their performance, they thought they were good to go and performing normally. In other words, they were not aware of their impairments or how significant they actually were.

In his article *Stress and Insomnia – Surprising Solutions* (Health and Stress Newsletter) Dr. Paul Rosch reports that numerous research studies show—across the board—that stress is the common trigger for both short-term and acute insomnia. Stress drains your emotional and physical energy reserves until you feel like you are operating on raw nerve energy. Stress related emotions can also cause headaches, indigestion, hormonal imbalances, susceptibility to colds, flu and infections, and more.

The bottom line is this, when you don't manage stressful thoughts and feelings during the day, they can disrupt your sleep patterns at night and when sleep isn't restful, you wake up tired. A few nights of restless sleep in a row can in turn make you more susceptible to frequent stress reactions during the day, which makes it even harder to turn off your mind and sleep at night, leading to a downward spiral that can have a major impact on your health, relationships, mental abilities and performance.

The good news is you don't have to become a victim of stress and sleeplessness, yet it's important to identify what factors are contributing to our stress so we can take charge of them and manage our reactions to them.

*"HeartMath techniques are demonstrated to provide powerful stress-reduction benefits in carefully designed scientific studies that are supported by a documented reduction in damaging stress hormones."*

—Paul Rosch, President, The American Institute of Stress

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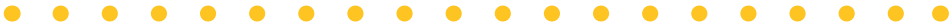
## The Stress Environment

In today's rapidly changing interconnected world, all of us are exposed to more stressors and we often develop unhealthy habits to cope with them. See which ones may apply to you:

**Information Overload**—Most of us have to process and deal with increasing amounts of information. This can lead to overwhelm and overload — more information coming in than our mental and emotional systems can keep up with. Some of us even get addicted to the mental stimulation of constant information input, whether checking email all the time, texting, surfing the net, staying glued to media news or playing video games into the wee hours of the night. Between the hours of midnight and 3:00 a.m., over 20 million Americans are watching TV. Add to this the number of those still surfing the net and you get the idea. This overstimulation and constant attention creates a type of mental stress and burns energy that over time can take a toll, making it harder to focus and disrupting our body's mental, emotional and physical rhythms. You can step back to ask, "Do I really want or need to be doing this now?"

**Speed of Change**—The #1 stressor we hear about in our HeartMath training programs is the feeling that time is speeding up and that there is too much to do and not enough time to do it all. This can create an emotional tension, mental fog, high levels of cortisol (the stress hormone) and nervous system burnout, all of which disrupt sleeping rhythms.

It's obvious the pace of change has sped up dramatically—and people's emotional reactions have sped up with it. The speed of change creates an atmosphere that feels like life is on fast-forward. Anxieties get amplified and so do impatience and irritation. A culture of speed pushes us to multitask, doing two, three, or more things at the same time. If you can take



time to rebalance before the next task or the next download of information—before your energy starts to drain and your body’s natural rhythms become disrupted—you can prevent a lot of stress.

**Stimulation Fatigue**—To keep up with the pace of life and all that has to get done, many people drink more coffee or energy drinks or take other types of stimulants, especially if they are not getting enough sleep. Constant energy expenditures which are fueled by caffeine or other stimulants can lead to a deeper chronic fatigue which can affect your overall health. This is sometimes called stimulation fatigue or adrenal fatigue, and is associated with diminished hormonal responses and imbalances which further disrupt the sleep cycle.

**Environmental Stressors**—Being overloaded means your mind and emotions can’t keep up, so you feel more reactive, irritable or worried. If you’re also tired, the smallest interruptions can set you off. Now multiply your reactivity by all the people around you who are overloaded as well. This collective emotional overload can create an exhausting stress atmosphere, at work, at home, and in society that can affect your ability to sleep. A frenetic stress atmosphere can create a background angst that affects the nervous system in ways that can make it difficult to fall asleep or sleep through the night.

Another environmental stressor that can disrupt sleep is the number and intensity of solar flares disturbing the earth’s magnetic fields and ionosphere, which vibrate at the same frequencies as our heart rhythms and brain waves. Many people are affected by these environmental energetic disruptions. Even if you can’t perceive them, they can be impacting your hormonal and

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nervous systems, causing mental fogginess or forgetfulness, mood changes such as unexplainable feelings of sadness, anxiety or angst, as well as sleeplessness.

There are other energetic stressors that many of us are sensitive to, including full moon energies, and some people are also sensitive to man-made electro-magnetic and microwave radiation. Practicing the methods in this Better Sleep Guide can help you manage these environmental stressors and progressively improve your sleep. Have compassion for yourself through the process.







## Part 2

### Your Body's Rhythms

Your body has various natural rhythms, including mental rhythms, emotional rhythms, metabolic, hormonal and sleep rhythms. The rhythm most associated with sleep is called the circadian rhythm. The circadian rhythm is a repeating cycle that occurs once every 24 hours.

We often think that during sleep, the body is just resting but it is actually very busy rebuilding and repairing itself. It is also accumulating energy and charging your inner battery. Your immune system is more active at night and you have higher levels of many hormones that are working to replenish your system so you are ready to take on the activities and challenges of the next day.

If your circadian rhythm pattern is disrupted (e.g. from prescription medications, excessive alcohol consumption, energy drinks, caffeine, changing shifts at work, jet lag or the most common cause - dealing with daily stressors), it throws off the nervous system rhythm and the body does not receive the normal amount of repairs and energy accumulation during sleep. When you don't sleep well for a number of nights, the energy depletion affects your mental, emotional and physical rhythms. These rhythm disturbances often result in poor concentration, lack of focus, getting overwhelmed more quickly, feeling anxious, irritable, dull or forgetful, and feeling less coordinated.

Within the 24 hour circadian rhythm there are many faster rhythms. An example is the rhythm of your mental capabilities and the rhythm of your moods and emotions. Research has shown that people tend to have more negative moods in the morning hours (this is probably where the saying, "I woke up on the wrong side

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of the bed" comes from), and more positive moods and feelings in the late morning (around 11 a.m.) and into the afternoon and evening. Most people are also familiar with the rhythm of the afternoon slump in their mental abilities.

## Taking Charge of Your Energy

There are steps that you can take to recover and replenish your energy, especially in your mental and emotional systems during the day. It can take a little time to refill your energy reserves and reset your natural rhythms if they've been out of whack for a while.

First it's important to identify and plug the sources of unnecessary energy drains, and this requires taking action to better manage your thoughts and emotions and your reactions to stressful situations. The second important step is to reset your circadian (sleep) rhythms so you get adequate renewal and restoration while you are sleeping, understanding your heart's rhythm is key to this process.

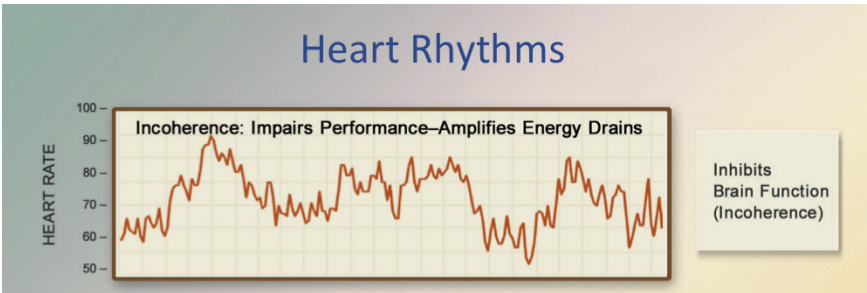
## Your Heart's Rhythm

Your heart rhythm reflects your emotional state. Stressful emotions (irritation, impatience, anger, frustration, anxiety, etc.) create jagged, irregular patterns in your heart rhythm. On the other hand, calming or uplifting positive emotions create order and smoothness in your heart rhythm. Your heart rhythm is called the master rhythm because it has a major impact on the brain and the body's other rhythms.

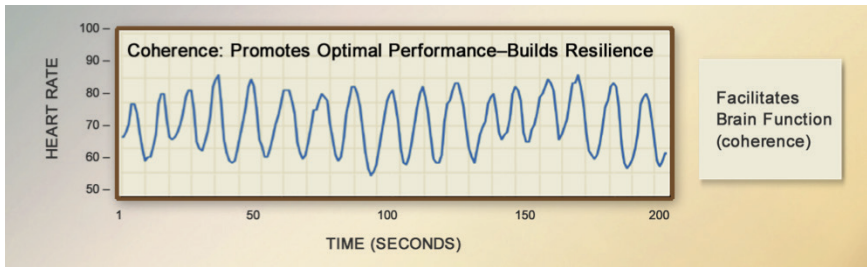
If your heart rhythm pattern is smooth and ordered (a coherent wave form), as shown in the bottom graph on page 18, it facilitates your brain functions and you feel more at ease and mentally clear. On the other hand, if your heart rhythm pattern is jerky and disordered (an incoherent wave form) as shown on the top graph on page 18, it impairs brain functions, especially in the area called



the executive center. This is the part of the brain that controls your ability to self-regulate your emotions, impulses and behaviors and make good decisions. When this part of the brain is not functioning optimally, you can be over-reactive, can't think clearly, and may say or do something you later regret. And if you go to bed with that stressed, jagged heart rhythm pattern, it can disrupt your sleeping rhythms.



**Stressful “negative” attitudes and emotions, like frustration and anxiety cause chaotic heart rhythms which impair mental functions and lead to increased cortisol levels which can disrupt sleep rhythms.**



**Positive attitudes and emotions, like appreciation or care create smooth coherent heart rhythms which enhance mental functions and lead to more restful and revitalizing sleep.**

The *emWave and Inner Balance Solution for Better Sleep* provides you with scientifically-validated HeartMath techniques to use with heart rhythm feedback to better plug energy drains, manage your energy draining responses to stressors and reset your rhythms.

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Even if you don't sleep like a baby on the first night, you will start to accrue benefits from the practice.

The emWave and Inner Balance technologies don't do it for you; they show you how to do it for yourself. They give you real-time feedback on the incoherence or coherence of your heart rhythm, which is your body's master rhythm. As you use the HeartMath techniques, the technology will show you when you have shifted into a more coherent rhythm. To help speed up the process HeartMath developed a heart rhythm coherence feedback technology called the emWave®, which won the Last Gadget Standing People's Choice Award at the 2009 International Consumer Electronics Show. We also developed the emWave Desktop, emWave Pro computer-based technology and the Inner Balance for iOS devices. Shifting into a coherent rhythm a few times during the day and before you go to sleep helps you release and deal more effectively with stress, adds energy to your system, and resets your body's rhythms for more restful sleep at night.

## Heart Rhythm Coherence Feedback

Heart rate is measured by how many times the heart beats in one minute. Heart rate actually changes with every heartbeat, and the measurement of these beat to beat changes over time is called Heart Rate Variability (HRV). The pattern of these beat-to-beat changes is called a heart rhythm pattern. Your heart rhythm pattern reflects interactions between your heart and brain, and the activity occurring in important brain centers and in your autonomic nervous system. Understanding HRV is significant, as it is a key indicator of physiological resilience, vitality, and mental and emotional flexibility—your capacity to respond effectively to stressors and challenges. Stressful emotions, such as anxiety, fear, anger, frustration and irritation, cause the HRV (heart rhythm) pattern to become disordered (top graph on page 18) indicating



you are out of sync you can't think as clearly and are wasting energy. It's like driving your car with one foot on the gas pedal with the other riding the brake and burning more gas. The good news is that positive emotions, such as gratitude, appreciation, love, care and compassion, cause the heart rhythm pattern to become ordered in a smooth coherent waveform called "heart coherence"—indicating that you are in sync, adding energy to all of your systems, physical, mental and emotional.

### **Heart Rhythm Pattern**

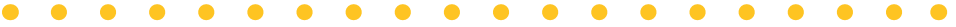
The emWave and Inner Balance technologies measure the degree of coherence, harmony, and stability occurring in your HRV or heart rhythm pattern. A more coherent pattern reflects efficient or optimal function, which is related to the ease and flow of energy and information in your nervous system and between your heart and brain. An erratic, incoherent pattern reflects stress and energy drain. The heart rhythm pattern tells the brain how the body feels and affects brain centers involved in decision making, the ability to deflect stress or maintain composure and to get a good night's sleep.

A wide range of benefits from practicing being in a heart coherent state (even for short periods) have been validated in numerous independent studies ([www.heartmath.org/research](http://www.heartmath.org/research)) and include the following:

### **Benefits of Heart Rhythm Coherence**

- Improves sleep – falling asleep faster and staying asleep.
- Helps you be in charge of your reactions and maintain composure in challenging situations

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- Neutralizes stressful reactions that erode health and mental and emotional composure
- Increases vitality and builds resilience for faster recovery from physical, mental and emotional stressors
- Enhances the ability to think clearly, find more efficient solutions to problems and improve performance
- Activates more intuition throughout the day

## Validated Outcomes—Mental Functions and Capacities

- 40% improvement in long-term memory
- 24% improvement in short-term memory
- Improved decision making

## Validated Outcomes—Personal Health

- Reduced fatigue and exhaustion
- Reductions in stress hormones
- Reduced anxiety
- Reduced physical stress symptoms

## Validated Outcomes—Workplace

- Reduced stress, drama and time and energy waste
- Improved communication
- Increased productivity
- Reduced health care costs



## Validated Outcomes - Sports

Coherence training is used by numerous medal winning Olympic athletes and professional sports teams to improve and sustain these performance measures:

- Increased endurance
- Improved concentration and focus under pressure
- Improved motor coordination and reaction time speeds
- Reduced muscle tremors (yips)
- Increased self-regulation of performance anxiety

In summary, HRV or heart rhythm coherence is a highly efficient state where less energy is being wasted. It is an optimal state in which the heart, mind and emotions are aligned and in sync. Practicing heart coherence techniques with heart rhythm coherence feedback increases resilience for deflecting stress or bouncing back quicker after challenging situations. Resilience is an energy hat gives you increased mental, emotional and physical flexibility and well-being and promotes deep, restful sleep.

### Benefits of Restful Sleep

- Wake up feeling rested, refreshed and ready for new day
- Increased mental awareness, concentration, focus
- Body energized, alert; less potential for accidents
- Improved memory
- Reduced risk of illness, disease

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## Part 3

### The Five Step Program

In this Program you will use three scientifically-validated HeartMath techniques along with your emWave or Inner Balance Trainer to improve the quality and coherence of your heart rhythms. Improving heart coherence will help to reset your response to stress and your body's rhythms for better sleep. As your heart rhythms become more coherent (smooth and ordered), your brain and nervous system synchronize to the heart's coherent rhythm, which helps you release mental and emotional stress accumulation.

#### Note:

Keep in mind there may be other causes for your sleep problems besides stress. This Better Sleep Guide can be used in conjunction with other aids. For example, if you have sleep apnea, which disrupts your breathing rhythm, then you may need a breathing aid while you sleep. If you are undergoing a life change (e.g. marriage, divorce, job change, move, travel) your sleep rhythms can be disrupted. Pregnancy, perimenopause, or menopause can also disrupt hormonal rhythms. If you have a long-term chemical imbalance or have extensively used sleeping pills, you may need certain organic compounds to help rebalance your body's biochemistry. It's important to see your health care provider for diagnosis and treatment of any medical concerns you may have and for advice on implementing lifestyle changes such as diet, supplements, exercise, etc.

This Program will show you how to calm your mind and emotions at any time. It will help you deal with the stress of time pressures, and overload, so your body is better prepared for sleep at the end of the day.

Let's get started.



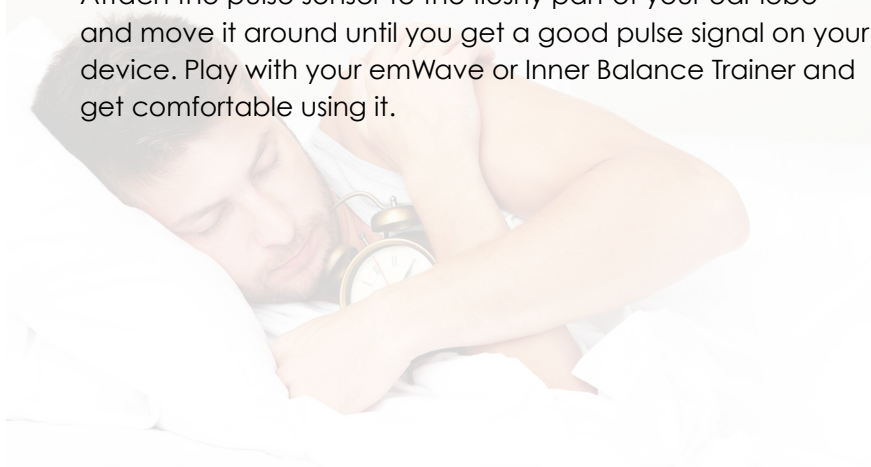


For many people the Five Step Program is all they will need to progressively improve sleep.

### Step 1—Learn to Operate your emWave or Inner Balance technology

In order to use this program, you will need to become familiar with how to operate your emWave or your Inner Balance technology for iOS devices. These heart rhythm coherence training technologies have been developed from over 20 years of scientific research conducted by Doc Childre and the Institute of HeartMath and have earned the Seal of Approval from the American Institute of Stress and rated as one of the top approaches for improving cognitive functions by the *Sharp Brains Guide to Brain Fitness*.

- Remove the contents from the box and read the instructions. We also recommend you take the short e-training program for the product you have [www.emwave-training.com](http://www.emwave-training.com) and/or attend the 1-hour telephone orientation class offered each week.
- Attach the pulse sensor to the fleshy part of your ear lobe and move it around until you get a good pulse signal on your device. Play with your emWave or Inner Balance Trainer and get comfortable using it.



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## Step 2—Learn the Quick Coherence® Technique

The first HeartMath technique you will be using is called the Quick Coherence Technique. Practice this technique until you can get into coherence with the technology before you add the other techniques. You can use this technique to increase heart rhythm coherence at any time, with or without the technology.

### Quick Coherence Technique

- 1. Heart Focus and Heart-Focused Breathing:** Focus your attention in the area of the heart and then breathe in slowly, deeply and casually to about a count of 5 or 6. Imagine the breath going in through the area of the heart and out through the area of the heart.
- 2. Heart Feeling:** Once you've found a smooth, easy breathing rhythm, try to activate a positive emotion, like gratitude or appreciation for the good things in your life, or the love and care you feel for someone or something (child, spouse, pet, a beautiful sunset, a fun vacation, a hobby, etc.).

You can learn this simple technique in several ways:

1. Read about the Quick Coherence technique in the Inner Balance app Quick Start Guide or in the HeartMath tab on your iOS device.
2. If you have an emWave PSR or emWave 2, load the Coherence Coach CD onto your computer (it's already installed in the emWave Desktop and emWave Pro) and learn the technique.



### Step 3—Practice the Quick Coherence technique while using your emWave or Inner Balance Technology.

Once you have learned the technique, you are ready to use it along with your device. Your goal in using the Quick Coherence technique with the technology is to get the red light on your emWave (red dot on your Inner Balance) to turn from red (low coherence) which is normal, to blue (medium coherence) which is much improved, to green (high coherence) which is the optimal state.

- **Heart Focus and Heart-Focused Breathing:** Focus your attention in the area of the heart and then breathe in slowly, deeply and casually to about a count of 5 or 6. Imagine the breath going in through the area of the heart and out through the area of the heart. Synchronize your breathing with the breath pacer on your device.
- **Heart Feeling:** Once you've found a smooth, easy breathing rhythm, try to activate a positive emotion, like gratitude or appreciation for the good things in your life, or the love and care you feel for someone or something (child, spouse, pet, a beautiful sunset, a fun vacation, a hobby, etc.).

Watch the light (or dot) change from red to blue to green. Sustain blue or green as long as you can. Make it a gentle process and continue to feel appreciation.

If you do the technique with your eyes closed, which can be helpful when you are first learning, you'll be able to tell when you have shifted into medium or high coherence through listening to the change in audio tones if you have the sound turned on.

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## Step 4—Preventing and Releasing Stress Accumulation

It's important to remember that how you manage your energy and what you do during the day can affect how you sleep at night. In order to effectively deal with sleeplessness it is essential to learn how to release stress as it occurs during the day and not let it build up.

Using emWave or Inner Balance several times during the day will help you release stress accumulation and regain balance, calm and composure, which increases energy and reduces fatigue. Getting in high coherence (in the green) will quickly align your heart and brain to bring you important perception shifts, so you can see a bigger picture or intuitive solutions to time pressures or stressful issues that you couldn't see before.

You can always take a one-minute coherence break between activities, at your desk, on a break, or anywhere. Shift focus to your heart (look at picture of a loved one, remember a favorite pet, or recall a time in nature) and feel appreciation or gratitude. It's important that the appreciation be heartfelt (not just from the mind) to activate heart coherence and the hormones that help bring harmony and stability to your mental and emotional processes. Breathe a genuine feeling or attitude of appreciation through the area of your heart for a minute (without mentally multi-tasking as you do this). Taking coherence breaks also builds resilience and helps you listen to your heart's intuitive guidance on what else you need to do to prevent or release stress build-up.



## Prep and Reset

There are several key times you'll want to use the Quick Coherence technique and "get in the green" with your heart coherence technology. It's important to use coherence feedback so that you know when you really have made the shift. It's easy when stressed to think you're back in balance when you're not. The technology keeps you honest and on track.

- **Times to Prep (prepare) for potentially stressful events**
  - ◇ First thing in the morning before you start your workday
  - ◇ Before a commute where you are likely to face traffic jams
  - ◇ Before going to speak with someone you know could be difficult
  - ◇ Before a meeting that could be challenging
  - ◇ Before responding to an email that you reacted to
  - ◇ Before any situation that is likely to trigger your emotions
  
- **Times to Reset (recover) from stressful episodes**
  - ◇ After a difficult conversation when you are stressing over what was said or what you should have said
  - ◇ After feeling overloaded by work or time pressure
  - ◇ After feeling anxious about something that didn't go the way you wanted
  - ◇ After anything that triggered you emotionally

# HeartMath Solution for Better Sleep

## The Carryover Effect

Using emWave or Inner Balance to prep or reset has a carryover effect. As you practice sitting in coherence, it adds energy to your system and opens a connection to your heart's intuitive guidance that carries over into your next perceptions and choices.

Just like a battery retains its charge, the accumulation of coherence in your mental and emotional system carries over into your activities and interactions, even when you're not walking around in physiological coherence (in the green). It gives you more objectivity to make better decisions. You'll find it easier to let go of irritations and regain inner balance, easier to be patient, to listen more deeply, to move with ease and find a flow in your communications.

The more often you use the Quick Coherence technique and "get in the green" for even a few minutes with the technology, the quicker you will be able to change your stress set point. And as you learn to clear stress as you go, you reduce the amount of cortisol (stress hormone) you are adding to your system, which can help you sleep better at night.

## The 30 Minute Game

Try this regenerating game and see if it doesn't carryover into your day. As soon as you know you are awake in the morning, start using the Quick Coherence technique, breathing a feeling of calm, ease or appreciation. Continue breathing calm, ease or appreciation as often as you can remember as you get out of bed, use the bathroom, get dressed, etc. for 30 minutes. If you forget for a minute or two, then just start up again as soon as you remember. Observe how long the carryover effect lasts into your morning and "reboot" with Quick Coherence when you feel it fading. If you had a sleepless night, playing the 30 minute game and then doing a morning "Prep" with your emWave or



Inner Balance will help you regenerate and have more resilience through the day. This can also help off-set the tendency to wake up in a negative mood or be more susceptible to negative moods during the first few hours of the morning.

## Step 5—Get into Heart Coherence before Sleep

Using your emWave or Inner Balance to get into heart coherence right before sleep can not only help you slide into deep sleep, it's an important step in resetting your natural sleep rhythm.

Sometimes it's harder to quiet the mind before sleep. You may have what are called "recurring thought loops" about a person or situation. Your mind rehashes a situation and your emotions react to what you are thinking with worry, anger or other stressful feeling. These stressful thoughts and feelings generate incoherence in your heart's rhythms and make it much harder to fall asleep or stay asleep. You can wake up in the middle of the night or in the morning and start right up where you left off with feelings of worry or projecting negative outcomes. Or you can "wake up on the wrong side of the bed" as the saying goes, feeling grumpy or anxious without knowing why.

The second HeartMath technique you will learn, called the Heart Lock-In® technique will help you sustain coherence for longer periods and quiet stubborn recurring mental and emotional loops. You can practice the Heart Lock-in technique with your emWave or Inner Balance technology (instead of the Quick Coherence technique) before sleep or in the morning to assist emotional healing. Turn on the audio and let the tones guide you into coherence and help you sustain coherence. Listening to the tones with eyes closed can help you stay with the positive feeling as you drift off to sleep. If you wake up in the middle of the night, gently unfocus and float as you use the Heart Lock-in technique without the technology to help you fall back to sleep.

# HeartMath Solution for Better Sleep

## Heart Lock-In Technique:

1. Shift your attention to the area of your heart and breathe slowly and deeply.
2. Activate and sustain a genuine feeling of appreciation or care for someone or something in your life.
3. Radiate these feelings of care toward yourself and others. This helps recharge and balance your system.

In Step 3, just radiate positive feelings from the heart. Gently feel as if these positive emotions are going out to others, to the world, or to you. If stressful thoughts or preoccupations try to take over, bring your focus and your breathing gently back to the area around the heart. Try to feel a caring softness in your heart area and reconnect with feelings of care, appreciation or gratitude for someone or something in your life.

## Before you go to Sleep

Sit or lie in bed and practice the Heart Lock in technique with your emWave or Inner Balance for 10 to 15 minutes at Challenge Level 1. (If you are using emWave Desktop or emWave Pro, do a 10-15 min session at your computer before going to bed.) Turn on the audio tone to guide you into coherence (unless it will bother someone else) so you can close your eyes. Do this each night for one to two weeks. Many people have noticed a difference in sleep quality right away or within two weeks of practicing heart rhythm coherence right before bed.

If you find it very easy to stay in high coherence yet still have trouble falling sleep, you can move to Challenge Level 2 which will help you further increase coherence in your heart rhythm pattern.





Keep your emWave2 or Inner Balance near your bed where you can easily reach it with minimum movement if you awaken during the night and can't get back to sleep no matter what you do. If this occurs, just "get in the green" again with the Heart Lock-in® technique until you fall back asleep.

The Five Step Program works best if you practice daily and give yourself time to reset your rhythms. Resetting habit patterns and rhythms is a process. It usually takes six to nine weeks to reset a neural habit. There will be modulations. Be patient and compassionate with yourself. Remember not to disrupt your body's rhythms with caffeine or other stimulants before bed. Allow your body to reset its rhythms and you'll start to notice a difference both in how you feel during the day and in the quality of your sleep at night. Even if there are nights of restless sleep, you should see your overall sleep quality improving, especially if you are also improving your sleep hygiene by following the common sense practical tips on p. 3 and in the Appendix.



# HeartMath Solution for Better Sleep



## Summary of the Five Step Program

1. Learn to operate your emWave or Inner Balance technology.
2. Learn the simple Quick Coherence technique.
3. Practice the Quick Coherence technique with the technology to get in medium coherence (blue) then high coherence (green) and stay in high coherence for longer periods.
4. Prevent and release stress accumulation by using the emWave or Inner Balance for a few minutes to “Prep” before a potentially stressful situation and to “Reset” quickly after a stressful experience. Enjoy the carryover-effect as you move with more ease and flow and make better choices.
5. Get into heart coherence before sleep. Use the Heart Lock-In technique with your emWave or Inner Balance and “get in the green” for 10-15 minutes just before going to bed and again if you wake up during the night and have difficulty falling back asleep. The combination of learning to “Prep and Reset” during the day, the carryover effect, and getting into heart coherence before bed is a natural way to help you fall asleep more readily, sleep more deeply, and wake up feeling more refreshed.

Know that self-regulation with heart coherence feedback has been very effective at improving sleep. In HeartMath's work with the US Navy, we were able to reduce the number of sailors (deployed on a high stress mission) taking sleep medications from 80% to 5%. You will find other outcome data and results you can expect on p. 36.



## Bonus Technique: Inner-Ease™

Once you are comfortable using the Five Step Program and increasing your heart coherence, you can add the third HeartMath technique, called Inner-Ease™ which you can use with or without the technology.

The Inner-Ease technique is designed to help you regulate the balance and cooperation between your heart, mind and emotions *while you move through activities*.

Using the Inner Ease technique is a bonus because it helps you create more ease and flow on the go, especially when you feel rushed, time-deprived, tension or angst—in meetings, on the phone, anywhere. It helps you move in a *state of ease*, where you are composed and balanced on the inside, but ready for intelligent action. This can create a much easier transit through challenges, bringing you more creativity and intuitive guidance for effective reasoning, discernment and communication.



# HeartMath Solution for Better Sleep

## The Inner-Ease Technique

- Step 1: Acknowledge your feelings as soon as you sense that you are out of sync or feeling common stressors such as frustration, impatience, anxiety, overload, anger, mental gridlock, being judgmental, etc.
- Step 2: Take a short time-out and do Heart-Focused Breathing: Breathe a little slower than usual; pretend you are breathing through your heart or chest area.
- Step 3: During Heart-Focused breathing, imagine with each breath that you are drawing in a feeling of inner ease and emotional balance.
- Step 4: When the stressful feelings have calmed, affirm with a heartfelt commitment that you want to anchor and maintain the state of ease as you re-engage in your projects, challenges or daily interactions.

Once you have learned the technique you can just remember and use these Quick Steps while on the go.

## Inner-Ease Quick Steps

- Step 1: Acknowledge your feelings
- Step 2: Heart-focused breathing
- Step 3: Draw in a feeling of inner ease and emotional balance
- Step 4: Affirm, anchor and maintain the state of inner ease



## Results You Can Expect

HeartMath has provided hundreds of training programs for thousands of individuals, health care professionals, corporations, health care organizations, schools, and the U.S. military. Many of the programs include pre and post assessments called the POQA (Personal and Organizational Quality Assessment) survey. The following data was compiled from over 5,600 men and women. As you practice HeartMath techniques with the emWave or Inner Balance technology, you can expect similar results.

In just six to nine weeks, HeartMath programs consistently achieved the following outcomes. In addition, post-assessments after six months and one year showed sustained improvements.

- 58% reduction in metabolic syndrome (3 or more of 5 major health risk factors\*)
- 44% drop in feeling tired
- 52% drop in feeling exhausted
- 52% drop in anxiety
- 60% drop in depression
- 61% drop in feeling annoyed
- 33% improvement in sleep

\*high blood pressure; low HDL cholesterol; high glucose levels, high triglycerides, large waist circumference

The POQA is a normed and validated assessment instrument that is taken at the beginning of HeartMath training and again 6 weeks after (in class or online). The survey takes 10-15 minutes to complete. Participants gain more insight into the scope of stress and the links between physical, emotional and behavioral symptoms they are experiencing. Surveys are confidential

# HeartMath Solution for Better Sleep

and are sent directly to the Institute of HeartMath for analysis. For organizations, an aggregate analysis and group report is provided. The 52-question POQA survey measures physical stress symptoms, psychological health, resilience, emotional competencies, and organizational quality organized into four factors: Emotional Vitality, Emotional Stress, Organizational Stress, and Physical Stress. Each of the four factors has been constructed into a robust, statistically valid and reliable scale with subscales to provide a fine-grained picture of your workforce. Questions include a seven point response scale (e.g. not at all, once in a while, sometimes, fairly often, often, very often, always).

HeartMath also has an online Stress and Well-Being Survey where you can track progress at [www.heartmath.org](http://www.heartmath.org).

**If you would like further training, private coaching or additional assistance please call us and speak with one of our HeartMath specialists at 1-800-450-9111.**





## Part 4

### Success Stories with Helpful Tips

“Despite having practiced HeartMath for several years, I still deal with occasional occurrences of ‘overcare’ either due to worry about problems, or over-stimulation from technical challenges at work. The symptoms are that I can’t fall asleep because I’m churning the issues over and over, or I will wake up in the middle of the night and have a hard time falling back asleep, since I continue thinking about the issues. Just using Quick Coherence and similar techniques is not always enough. So I have my emWave on my night stand, I set the lights to low and the sound is off so my wife doesn’t wake up. By being able to practice the HeartMath techniques with the help of the emWave, it helps me really get to coherence and not just hope I’ll get there. The emWave also distracts my focus from the conscious thoughts or worries. Five minutes of watching the green light are usually enough to slip back into my restful sleep pattern. Since I have used emWave in this way, now just its appearance on my night stand when I wake up actually helps trigger this restful rhythm response.”

**Harvey S. Software Engineer, San Jose CA.**

“After several months of very few hours sleep per night, it became critical for me to find a solution. I didn’t want to take a sleeping pill, but my doctor reassured me that it wouldn’t make me dependant. It seemed a life saver to begin with – ah, the magic of a good night’s sleep. However, there were a few side effects and after awhile I didn’t want to take it. Now that I’d caught up on some sleep, I didn’t think that I would need the sleeping aid anymore. So, I figured I could just stop taking it – no problem. Well that is when the problems really began. I wasn’t able to sleep at all. The withdrawal symptoms were worse than the original sleeplessness. I went back to the pill and tried to cut back more slowly, but that didn’t work either.

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Luckily, a friend showed me the emWave Personal Stress Reliever. I'm a take-charge executive. I work long hours and always have a lot on my plate, so I was looking forward to the stress relief benefits as well as sleeping better. I used the emWave with the herb Valerian to help wean me from the sleeping pills. It took nearly 5 somewhat sleepless nights but I could feel it progressively working. Now, I use the emWave before bed and am sleeping well. Here's what I do:

First, I get comfortable in bed, under the covers, resting against the pillow with the light on and eyes open. I relax as if I were going to read an inspirational book. Second, I hold the emWave in my hand with my thumb on the sensor (alternately, I could easily use the ear sensor). Third, I begin heart focus, heart breathing and heart feeling as I watch the light change from red to blue to green. I focus on the region around my heart and breathe evenly in and out as in meditation or yoga. I recall when I felt care for someone or something or felt appreciated during the day.

I feel what it's like when seeing the face of a loved one or experiencing a wonderful moment. I anchor that positive feeling and feel the warmth surround me. Occasionally, I watch the blue LED lights rise and fall to aid my breathing and watch the progress made (bars increasing). Once I get into the green, I listen to the tones, which reinforce the feeling that it is working and help to celebrate the success. I use the emWave for 5-10 minutes this way and then retain the feeling of this coherent state for 5 minutes more without the emWave. (Note: This process works even if I wasn't able to retain a green or blue state for the full time of 5-10 minutes.) During that time, I begin to feel ready to go to sleep. I set the emWave down, turn the light off, slide down into bed, and, go to sleep!

During the first few weeks of coming off the sleeping pill and using the emWave before bed, I'd wake up in the night and find it hard to go back to sleep. I'd wake up and in would flood some unresolved issues and worries, that in my vulnerability in the middle of the night I'd make into big deals, or ideas would come to mind that I didn't want





to forget. If I got up to write them down, it would wake me up more. When this happened, I'd get frustrated that I couldn't get back to sleep and worry about waking up tired and dragging around the next day. I finally realized I could use the emWave with Quick Coherence or Attitude Breathing at those times to ease me back into my sleep mode.

Now, when I wake up in the middle of the night with any accumulated stress, I don't allow myself to go there. I apply the heart focus and quietly say, 'stop' to the turbulent thoughts. I slowly heart-breathe and feel appreciation or recall that place I go to when I'm 'in green' on the emWave. I get my whole body relaxed into the pillow and mattress as if I were in deep sleep and just calmly ease into heart breathing in my comfortable sleep position. I heart lock-in on that feeling and sustain a really positive feeling such as being on a beach. This usually works to get my sleeping rhythm to take over and most of the time I slip back off to sleep right away.

If I wake up and think of something important I want to remember or something I forgot to do, I find it's better to just let it go. If I do decide to write it down, then I stay in a peaceful heart and go back to sleep mode—the feeling I get when I'm totally relaxed and ready to slip into sleep. I just write down a few key words and not get into the head stuff about it, as that's what will wake me up.

I understand it's a process resetting your rhythms. When I first started using these techniques, it took a little longer than I liked to fall back to sleep after I'd wake up in the middle of the night, but progressively the time got shorter. The sleep pattern gradually improves. Now I have longer periods being asleep and shorter and fewer periods awake. I feel more refreshed and function better in the day. I also use Attitude Breathing with emWave during the day to clear unresolved issues so I don't wake up with them at night. This is what works for me. It is truly amazing and worth trying for yourself. The emWave has made a huge difference. Thank you HeartMath."

**-Katie C., Corporate Executive, Redwood City CA.**

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“I first learned about HeartMath and emWave in the fall of 2006. I researched it, and discovered it was backed by proven science and clinical research. I had been struggling to overcome anxiety and being a Type A personality doesn't help. I am a medical student and during my education, for almost the past two years, I have used emWave to help me with exam related stress and to improve my sleep. The HeartMath techniques with emWave have given me the ability to improve my concentration and academic performance as well as my sleep.

I use the emWave for roughly 10-15 minutes while lying in bed right before I go to sleep for a more restful sleep. Stress is in everyone's lives more than ever these days, and if you are at your 'wit's end' with stress, then I strongly suggest you use the emWave regularly. You will find your mind in a clearer state, concentration, memory processing, and emotional stability will all improve, at least from my experience. I can honestly say that HeartMath has changed my life in such a positive way that I don't know where I'd be without it. Thank you to everyone at HeartMath.”

**-Robert S., a medical student**

“In late 2012 my father began having terrible bouts with insomnia. He would sleep 1-2 hours a night, sometimes not at all, and it became evident that he was in a cycle that I had once been in -- a cycle of stress leading to insomnia leading to depression leading to more stress, and of course more insomnia.

About 6 months before that, I had been experiencing insomnia almost every night, and I had just learned to live with it. I was very high stress, and would have frequent anxiety attacks. I began purchasing things recommended for breaking through stress. I noticed a blogger's #1 recommendation was the emWave2, so I purchased one and began my coherence training. Needless to say, today as I write this story, I'm a different person than I was that day.



When my father came to me with his insomnia problem he had already developed high blood pressure from the stress and was taking medication for it. The doctors had given him a leading prescription sleep sedative and a host of other unsavory drugs to help him get to sleep. At one point he was taking more than one sedative a night and still not sleeping.

I had mentioned the emWave2 to him multiple times and how it helped me, but he was skeptical and labeled it a 'holistic' approach. The issue persisted for months with my dad going back to the hospital multiple times a week for sleep studies, blood tests, MRI's -- the whole medical nine yards. Nothing was working.

My family and I became tremendously worried. My father is 67 years old and his health was only getting worse. He became disillusioned with the treatment options he was given, but I implored him one night and showed him the HeartMath diagram that outlines stress and explains how coherence training works.

He purchased an emWave that night and began his HRV coherence training. Two weeks later, he had reduced the amount of the sedative he was taking to one a night. Two months later he was cutting that in half. I visited him earlier this week and I'm happy to say he's completely independent of this sedative. The only variable that had changed was the emWave. I'd like to give my warmest thanks to the Institute of HeartMath for this. Your work gave my father back his life, and has made me a better person. I try to tell people about HRV training with the emWave whenever I can because it has had such a profound impact on my life and the lives of my family members. I feel as though this technology could literally reshape the world if more people knew about it. Sincerely and coherently."

—Peter M., Network Technician for a wireless provider

# HeartMath Solution for Better Sleep

“I had the opportunity to visit with our Sailors in Afghanistan last fall and the leadership told me that the HeartMath program is clearly helping the Sailors that use it and they had a number of compelling examples. A common theme was improved sleep, and the ability to sustain their composure in high stress interactions with the detainees.

—**CAPT Laraway, Operation Stress Control Officer, US Navy**

“HeartMath has helped with my insomnia but also quelling some free floating anxious feelings.”

—**Danielle F.**

“I had not slept well and awoke feeling very tired. My heart prompted me to go get my emWave. I did, and while lying in bed I started my heart breathing, heart focus and sending love and appreciation to those I love. I felt my body let go into a deeper relaxed mode. After finishing the exercise I felt rejuvenated, even better than as if I had a full night's sleep.”

—**Catherine, commercial bus driver**

“It has now been about three and a half weeks that I have been enjoying about 6 hours of non-medicated sleep per night. What a difference this HeartMath program has made!! Sometimes I do wake up in the middle of the night, in which case I just repeat the before-bed process. At first I used the emWave for just five minutes before bed, now I'm finding that 15-20 minutes goes by with little effort, and then sleep just comes.”

—**Natalie E., Singer, Songwriter, Performer**



“I have PTSD and have had nightmares almost every night all my life. The first time I used emWave right before sleep, I had my first night's sleep with NO nightmares, and it still works every night! Also, having once been very articulate, I was very frustrated by memory problems affecting word recall. I struggled to find even simple every day words as I stammered, felt stupid and was often unable to express what I wanted. A few days after using emWave daily, I actually found myself discussing some fairly deep, abstract subjects fluently and effortlessly with NO word recall problem! It's also helped me with anxiety – it helps me calm before difficult tasks, calm after upsets, and get clearer to make important decisions. emWave has improved my life in many ways!”

— **Becky F. Psychiatric Social Worker**

“Using the emWave before going to bed has enabled me to quiet the noise from the day, focus my attention in my heart and on things I appreciate. Doing so has created more consistent, peaceful sleep and overtime has anchored this sleep pattern as my norm”.

—**Holly T. Nurse**

“If I wake up in the middle of the night thinking or worrying about something so I have trouble getting back to sleep, I take out my emWave and use it. By using the Quick Coherence Technique, my heart intelligence will tell me what the real cause of the upset is, and often valuable information about how to resolve it. Sometimes use of additional HeartMath techniques like Attitude Breathing are indicated. But I always feel so much better, more resolved and at ease and ready for sleep and then the next day ahead.”

—**Melinda D. Corporate Controller**

## HeartMath Solution for Better Sleep

“It wasn’t until I became a full time Mom that I truly understood the meaning of hard work and sleepless nights. Insomnia almost killed me. In fact after my daughter was born I developed a chronic case of insomnia that became so severe my husband took me to every doctor and specialist we could find. Nothing worked for me. Not even pharmaceutical sleeping aids. Month after month I was getting by with less than three hours a night of sleep. Anyone who has suffered from insomnia knows the darkness that descends when you’re that sleep deprived. Then a doctor finally told me about emWave and it changed my life. emWave is a scientifically validated system for managing stress that can have a profound impact on stress symptoms like insomnia. Through a simple process that takes less than 5 minutes, you can learn how to control your heart rhythms. In minutes a day I can now control my stress. I’m sleeping better. I have more patience and energy for my daughter. And I’m a thousand times more optimistic. I have the greatest compassion for those suffering from the debilitating effects of insomnia. That’s why I recommend the emWave with all of my heart and soul.”

—Traci W., Supermom Company co-founder





## Appendix

### Practical Tips for Better Sleep

#### #1 The number one tip for better sleep

Put stress in check. One of the first symptoms of stress overload is disrupted sleep. Stressful feelings throw our inner rhythms out of sync and have a negative carryover effect on hormonal and nervous systems – making it difficult to sleep. You can use other sleep tips, but if managing stress isn't a priority, other strategies have less chance of helping you get the quality sleep you need.

#### #2 Eat right and get regular exercise

Light exercise in the evening can help release tension without over stimulating the body. Try simple yoga postures or gentle stretching exercises to help you unwind. As little as ten minutes can be beneficial and help promote sleep.

Save the caffeine for morning. Believe it or not, caffeine can cause sleep problems up to ten hours after drinking it. Experiment with eliminating caffeine after dinner or after lunch.

Avoid large meals at night. Try having your dinner earlier in the evening and avoid heavy, rich foods within two to three hours of bed as they use a lot of energy to digest.

Try an herbal nightcap. Instead of alcohol before bed try some chamomile tea, which has relaxing and soothing properties. Alcohol can reduce sleep quality and possibly even contribute to waking you up later in the night.

# HeartMath Solution for Better Sleep

## #3 Regulate your sleep schedule

Keep a regular sleep schedule. This is an important strategy for good sleep hygiene. Try to go to bed and get up at the same time each day. Try to maintain your usual sleep time and wake-time even on weekends so you build consistency into your routine.

Recharge with a power nap. Limit naps to 20-30 minutes and try and get them in in the earlier part of the afternoon so you don't throw off your sleep routine.

## #4 Create a relaxing night time routine

Carve out some wind down time. At an hour or two before bed stop stimulating activities such as being on the computer or watching TV. Instead, opt for quieter things such as reading, knitting, taking a bath or listening to soothing music.

Soothing sounds help prepare you for quiet. If you live in a noisy area with sirens, barking dogs, city traffic, etc., camouflage the noise with a fan or perhaps a CD of nature sounds. You might also try a sound machine with white noise. Good-old-fashion earplugs can also be helpful.

Check your thermostat. The ideal sleeping temperature for your bedroom should be around 65° F. A room that is too warm or too cold can affect your quality of sleep. Also make sure you have good air flow and ventilation. A fan on low can keep the air gently moving, which prevents the room from getting stuffy.

## #5 Take charge of your well-being

Remember that sleep deprivation reduces HRV (heart rate variability) and low HRV is a significant risk factor for chronic diseases, heart attacks and all-cause mortality.





A Harvard study that followed 122,000 women for over ten years found that those who slept five or less hours a night were 82 percent more likely to have a heart attack compared to the control group who slept eight or more hours. Even women who got six hours of sleep nightly had 30 percent higher heart attack rates.

Another study of almost 5000 people 59 and younger who slept less than six hours a night had more than double the risk of high blood pressure, compared to control group who slept more than six hours.

Cortisol levels are generally high upon waking, increase over the next hour or two, and fall to much lower values at bedtime. Stress can alter this normal health pattern in several ways. One study showed that when older adults went to bed feeling lonely, sad or overwhelmed, they had much higher levels of cortisol than normal shortly after waking up in the morning.

As with stress, depression can be both a cause and consequence of insomnia. One sleep survey found that over 40% of patients reported symptoms of insomnia before the development of a mood disorder.

Another found that patients with persistent insomnia were 3.5 times more likely to develop depression over the next 12 months compared to controls with no sleep complaints. Insomniacs were also five times more likely to experience strong paranoid thoughts than others without sleep complaints and were more prone to addiction problems.

Chronic sleep deprivation is also associated with higher rates of ADHD. Increasing total sleep time can improve mood, emotional responses, concentration, and memory, scholastic and athletic performance.

Short naps of 15-30 minutes have been shown to be effective in improving alertness as well as productivity and more companies are recognizing this and providing rooms for employees to use to take "power naps".

# HeartMath Solution for Better Sleep



## Notes





## Additional Resources

[www.heartmath.com](http://www.heartmath.com) • 1-800-450-9111

### The emWave2® or Inner Balance™

A portable and convenient way to reduce stress, balance emotions, and increase performance. Used just a few minutes a day, this simple-to-use technology helps you transform feelings of anger, anxiety or frustration into more peace, ease and clarity.

As you practice on the go or at your computer you increase your coherence baseline and your ability to take charge of your emotional reactions. Health, communication, relationships and quality of life improve.



### emWave® Pro for PC & Mac

emWave Pro is a scientifically validated hardware/software system that teaches techniques to help you create an optimal state in which the heart, mind and emotions are operating in- sync and balanced. We call this state coherence.

emWave technology helps you achieve coherence through simple-to-learn exercises and feedback. Using a pulse sensor plugged into your USB port, emWave Pro collects and translates HRV (heart rate variability) data

into user-friendly graphics. Through coherence techniques, interactive exercises and game play, the emWave technology helps you bring your heart and mind into a coherent state, building resilience, increasing energy, and promoting focus, mental clarity and emotional balance.

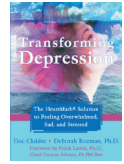


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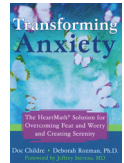
## **Transforming Depression: The HeartMath® Solution to Feeling Overwhelmed, Sad, and Stressed**

by Doc Childre and Deborah Rozman, Ph.D.



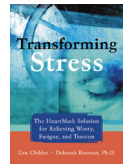
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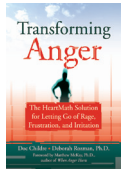
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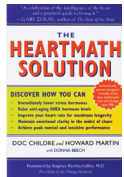
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