

# GUIDE

to Gaining Maximum Benefit from your



## MindSpa Personal Development System

Improving Your Quality of Life from the Inside Out

Sleep Enhancement ▲ Relaxation ▲ Rejuvenation ▲ Meditation ▲ Mindfulness ▲ Circadian Balance

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# Important Notice!

## Special Considerations Before Beginning Use



The use of MindSpa pulsed auditory/visual technology is safe for most people, as there are no known serious side effects. However, there are few cases in which MindSpa should only be used with the prior approval and monitoring of a medical or health-care professional, and certain conditions under which MindSpa should not be used at all.

- If you're on medication that impacts cognitive abilities, MindSpa technology may not be right for you at this time. Consult with a medical professional before beginning use.
- Persons suffering from any sort of serious physical or medical condition— including epilepsy, brain injury, mental impairments, visual photosensitivity, any form of macular degeneration, cardiac arrhythmia or other heart disorders—or those using a pacemaker must consult with a medical professional before beginning use.
- Children or minors should use only with prior parental consent and monitoring.
- Do not use while under the influence of drugs or alcohol.
- Do not use while operating machinery, vehicles or other mechanical devices.
- While very rare, discontinue use if you experience any adverse reactions such as dizziness, headache, migraine, or anxiety. Please consult with a medical professional if these or any other unusual symptoms occur or persist.

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## A Brief Background on Photic Stimulation

As you likely do appreciate, the human brain is an incredibly complex organism, and its activity is far from static. Our brainwaves are in constant motion as we exhibit a wide variety of constantly changing, minute electrical activities simultaneously across all parts of our brain, day and night.

Every bit of input affects brainwave flow. There are a number of ways to direct that flow, including auditory and photic stimulation.

The understanding that light has a powerful effect on humans goes back nearly a century. Early in the 20th century, scientists developed the first EEG instruments sensitive enough to measure electrical brainwave activity.

In 1924, German psychiatrist Hans Berger developed the first electroencephalography device (EEG) and was the first to identify the fact that the brain produces electrical output in a wave form we refer to as brainwaves. In 1929, Berger published the first of 23 research papers on his results, which were initially met with derision from the German medical community.

At that time, the idea that the brain produces electrical output was completely outside the boundaries of the believable (just as was the idea, prior to Copernicus, that the Earth revolved around the sun).

However, soon after the discovery of brainwaves, early experiments determined that these wave-form patterns could be altered by strobes of light blinking in the alpha brainwave frequency range. In 1934, Edgar Douglas Adrian and B.H.C. Matthews were the first to describe changes in brainwave activity attributed to flickering light.



*Among the world's first commercial brainwave synchronizers, circa 1959–1974 (pictured, model #4, mid-1960s)*

Dr. William Kroger was the first to publish results on photic stimulation. The US military in the 1950s asked Dr. Kroger to study why servicemen staring at radar blips would go into trance. It turns out these blips were appearing at approximately 10 per second, or 10Hz, which is right in the alpha brainwave range.

Dr. Kroger teamed up with Sidney Schneider to produce devices such as the one pictured. These devices were manufactured from 1959 through 1974 at several times the expense of today's modern devices.

In the journal *Anesthesiology*, George S. Bause (2010) reflects on the history of the Brain Wave Synchronizer:

*After observing how some radar technicians had become “transfixed” by rhythmic flashing dots on their radar screens, inventor Sidney Schneider designed his Brain Wave Synchronizer (BWS) to hypnotize by visually stimulating subjects at frequencies mimicking those of their alpha, beta, or delta brainwaves. In 1959 Schneider and hypnotist-obstetrician William Kroger, M.D., published their use of the BWS in prenatal classes for thousands of women prior to its use as an “electronic aid for hypnotic induction” during labor and delivery [Kroger & Schneider, 1959]. Four years later, Chicago anesthesiologist Max S. Sadove, M.D., published his work on how BWS-induced hypnosis could reduce anesthetic agent requirements during general anesthesia [Sadove, 1963].*

Countless health-based fads and so-called “miracle cures” have come and gone. Yet investigation of relevant, legitimate uses for auditory and visual stimulation endures. Today, more photic and auditory research than ever is being conducted by leading universities like MIT, and continues to gain popularity.



# How to Use Your Manual

This book is your comprehensive companion to your [MindSpa User Guide](#).

We suggest at minimum, please read **Chapter I**, as it will help you get the most from your use of the MindSpa.

**Chapter II** gives you an overview of the technology, while **Chapter III** is a simple and straightforward overview of sessions and the suggested order in which to use them.

In the chapters following, we offer you the most complete manual found anywhere on the use of this technology and how to gain benefit from it for a better and healthier life.



# Using MindSpa for Maximum Effectiveness

## Regular Relaxation Breaks

Making a commitment to use MindSpa's relaxation sessions *on a regular basis for a minimum of four to six weeks* can have significant positive impact on stress levels and emotional well-being.

The goal is to allow your mind to consistently enter states of relaxation, focus and attention. With regular use of our sessions, you will find that when you encounter common stress-producing situations, you will be better able to maintain inner calm and sharper focus. This in turn will improve how you handle and manage every aspect of life and lead to better quality sleep.

Conversely, when you feel like you need a quick pick-me-up, or when you don't feel as mentally sharp as you would like, MindSpa provides stimulation sessions for entering the cognitive attention state.

In practical terms, MindSpa will help you develop internal tools to have at your disposal when you sense you are becoming agitated, pressured or stressed, allowing you to exert conscious control over these situations. This will result in generally feeling better in a variety of situations that formerly produced stress and its many negative consequences.

With regular use, MindSpa will become an indispensable tool that can result in improved sleep, cognitive enhancement, and ultimately a better quality of life.



The relaxation sessions may be used on a daily basis, once or twice per day. The stimulation sessions are suggested for use no more than once every two to three days. They can be used in conjunction with the relaxation sessions on alternate days.

While we do suggest everyday use, this is not essential. You may use MindSpa as few as three to four times per week, depending on your schedule. As previously stated; *the key to success is to develop a regular routine and be patient as the effect is cumulative.*

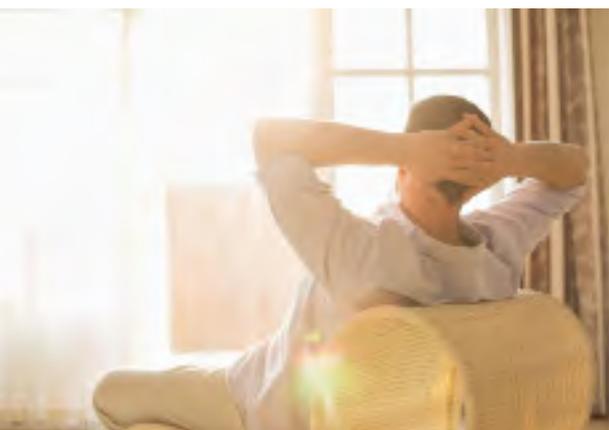
While we do offer suggestions for use, you are free to try the various relaxation sessions in any order you like. One of the strengths of the MindSpa system is that you are not required to follow a specific formula or method to obtain results.

## MindSpa Progressive Relaxation Sessions™

The MindSpa Personal Development System® focuses on moving us from the dominant, or most active, brainwave state to slower, deeper states. For example, right now you are most likely exhibiting beta-dominant activity because you are awake, aware, and reading these words. (We explain brainwave activity in greater detail later in this guide.)

Our relaxation sessions are designed to help you enter into gradually deeper relaxation states, just as regular gym workouts improve muscle tone make you increasingly stronger. Within each of the four groups of sessions, the frequencies and the lengths of each program help you progress a little deeper than the previous session.

If you are new to relaxation therapies such as meditation, it's best to start with one of our six Alpha sessions during your first two weeks. You can start with Session 1 for the first day or first few days and then progress to Sessions 2, 3, 4 and so on.



Then you can either follow each session progressively in order, or just pick sessions of your choosing. The wonderful thing is there is no specific formula required for successful use.

Whether you use the Progressive Relaxation method or simply try various sessions, with time and experience you will tend to gravitate toward the sessions you like best or an order you like best. Do switch up the sessions from time to time to avoid *habituation*, in which the mind can become too accustomed to a specific session, thereby decreasing its overall effectiveness.

The best times of day for your sessions are in the early to mid-morning, mid-afternoon, or just before dark. (Different rules apply when using the system to help adjust from jet lag, covered later).

In general terms we suggest against night use of the blue or white lights as these can be overstimulating and potentially disturb sleep patterns. However, we do offer optional led glasses that can be used for night use with good results. Optionally, at night you can choose to use the sound only.

Keep the sound low and the lights as bright as is comfortable for you. Take two or three deep breaths at the beginning of your session, sit or lay back, relax, close your eyes and allow your thoughts to drift by without analysis.

View these sessions as a way to slowly but consistently move you toward balance in your life. Be patient rather than looking for a quick fix. Proceed at your own comfortable pace with our system, and you will find it to be very effective.

## Stimulation Sessions

The stimulation sessions are useful for a quick mental pick-up. We suggest using stimulation sessions only during the day and well ahead of bedtime, as night use can be too stimulating, potentially causing sleep issues.

## Stimulation Sessions

Published university studies have shown those with diagnosed attention and focus issues, often described as attention deficit disorder (ADD) or attention deficit hyperactive disorder (ADHD), tend to have dominant brainwave patterns that are either too slow (theta brainwaves) or too fast (high beta brainwaves).

To counter this, certain types of stimulants are prescribed to help brainwave function enter the waking beta brainwave state and normalize function. These pharmacological interventions using stimulants help to alleviate the symptoms leave the underlying issues unresolved.

Light is a very powerful modality for promoting health and well-being when applied correctly. Understanding light and its effect on physiology can be invaluable. In this sense, using MindSpa can be of tremendous value for those with attention and focus issues using specific frequencies of light to help bring the mind into balance with regular use.

While MindSpa is not suggested as a replacement for physician-directed programs, it can be helpful long-term through the brainwave entrainment process – a safe, non-invasive approach, which may very well result in less need for pharmacology. \*Consult with your medical professional before making any changes to medication.

In addition to this manual, more information can be found on our website [www. avstim.com](http://www.avstim.com)

**Note:** If the stimulation sessions feel too invasive, simply stay with the relaxation sessions. Not everyone needs the stimulation sessions and can get full benefit from the relaxation sessions. If they do feel good, then the stimulation sessions probably are helpful for you. You might find you respond better to one set than the other. Stimulation sessions are explained later in greater detail.

# Operating Principles of Auditory and Visual Stimulation (AVS)

Auditory and Visual Stimulation (AVS) is a method of personal development that has evolved over several decades. It is a passive training procedure that can enable a person to alter physiological responses to induce a desired state of mind. It occurs through *brainwave entrainment*, which is a complex yet easily understood neurological process.

The primary form of brainwave entrainment we utilize is called *photic driving*. This means that the dominant brainwave frequencies are attempting to match the frequency input of lights into the eyes.

In biofeedback, the object for the individual is to deliberately try to calm or train mental activity. With AVS, passive inducement occurs without the conscious effort of the individual. There is no specialized training required.

## How AVS Technology is Applied

The stimulation of our senses has a very powerful effect on the brain. For example, petting a dog or cat can provide a relaxing tactile response. Listening to soft symphonic music provides an auditory response. Watching a beautiful sunset can provide a visual relaxation response. When two or more of the senses are brought together, as they are with visual-auditory stimulation—a sunset at the beach, for example—these responses can be even more pronounced.

The dual modalities of auditory and visual stimulation are introduced primarily through the optic nerve and ears; this input is then provided directly to the brain in the form of tiny electrical impulses.



This technology is applied through the use of custom-designed glasses inset with light-emitting diodes (LEDs), set at specific colors, angles and distances from the eye to optimize the desired effect. The glasses are generally used with eyes closed, so that the light is seen through the eyelids.

The lights flash at predetermined frequencies, and are coupled with specific audio tones.

The light emitting from the glasses and rate of flicker introduced by way of the optic nerve creates a matching effect, or induction, between the mind and the set rate of flickering. This moves the mind to either a more energetic state, or into deeply relaxing states.

The audio tones can take several forms, including *binaural beats*, which introduce differing tones in each ear. This creates a third tone—the difference between the left and right tone—within the brain. We also include *isochronic tones*—background sounds—to induce a change in state. Frequencies are determined by the preferred outcome.

## Frequency Following Response

The phenomenon of effects induced by the technology described above is known as *frequency following response*. Through this natural response mechanism, the mind matches its brainwave frequency to given visual or auditory stimuli, inducing a state of relaxation (or stimulation, if the input is designed for it).

Common examples demonstrating a typical relaxation response to visual or auditory stimuli are the effects of gazing into a gently flickering flame, or listening to the beat of ocean waves or soothing music.

Examples of a frequency following response that would produce stimulation include many types of dance music, fast action movies with quick camera changes, flashing neon signs, flashing police lights, and even waterfalls (the latter can also be relaxing).



## Results Offered by MindSpa Technology

The arousal states induced by the higher frequencies of our broad-spectrum white light leds have been found to generate enhanced mental activity.

The decreased mental activity induced by specific lower frequency rates, helping to balance the left and right brain hemispheres, has been found to reduce feelings of anxiety and stress. This promotes feelings of calmness and deep relaxation. The relaxation state allows the mind to operate more efficiently and with greater clarity.

## What Should I Expect with Long-Term Use?

In a sense, MindSpa acts as *training wheels for the mind*, helping your brain to enter deeply relaxed states with effects that are in many cases identical to the effects experienced from long-term meditation.

Various controlled studies conducted on long-term meditators demonstrate a long list of improvements in the functioning of mind and brain, as well as overall health benefits. Long-term practice of traditional meditation techniques have shown changes consistent with the development of a more balanced and stable level of awareness. This is characterized by increased wakefulness and improved patterns of cognitive and mental processing. These effects are also in turn associated with overall better physical and mental health.

Measures of brain function in meditators indicate increased brain activation, particularly in the frontal cortex, and increased available brain processing power. This leads to the synergistic development of “total brain function,” indicated by EEGs demonstrating activation over the entire cortex. This is a predictor of superior cognitive processing.



Studies have also shown a reduction in the biological age of meditators. The three measures typically used to accurately determine the biological age of an individual include auditory threshold, near-point vision, and systolic blood pressure. Control of hypertension is probably among the most important health application associated with long-term meditation.

We focus primarily on the practical mental and physical aspects associated with this type of practice. However, for many, meditation is a tool on a spiritual journey. Particularly in South Asian countries, long-term meditation is still widely held as the way to achieve enlightenment, the highest goal of human life. Later in this guide we touch upon this subject in greater detail.

Empirical science cannot directly study changes in consciousness and subjective awareness, but can determine objective measures associated with them. There is an old saying that the way to spiritual awakening is a many-spoked wheel. Using technology, like MindSpa, to achieve higher states of awareness is one such way.



## **A note on falling asleep while using MindSpa...**

It is perfectly okay to drift off into a light sleep-like state when using MindSpa. In fact, this experience may not be a light sleep at all, but rather a trance state. One indication that you were actually in a hypnotic state is if, when the session ends, you find yourself “waking up” naturally.

Even if you do fall into a light sleep—a “power nap”—the session will still have a positive impact.

If you find you are entering into deep slumber when using MindSpa, this can indicate a sleep deficit. In this case, you likely need to allow yourself time to get more quality sleep.

After completing a session, depending on circumstances you might experience anything from feeling completely refreshed and energized to feeling a bit drowsy. Many factors can influence how you feel after a session. Just keep active once you’re done with your session, and any drowsiness should pass relatively quickly—unless you are suffering from a serious lack of sleep.

# Progressive Relaxation Sessions

## Using the Sessions

- Find a quiet place, preferably with dim lighting, where you will remain undisturbed.
- You may sit or lie down.
- Keep the lights as bright as is comfortable for you.
- Keep the sound low, and gently close your eyes.

*Note: If you experience an auto-response in which your eyelids tend to blink with eyes closed, turn the brightness of the glasses down. Your personal comfort is very important.*

The best way to begin each session is with a few slow, deep breaths into your lower abdomen. To understand what this means, place your hand on you belly. In all likelihood it is relatively still at this moment.

Most likely, you will notice that you are breathing only into the upper part of your chest. This is especially prevalent when under stress, as we tend to take short, shallow breaths.

Now try three long inhale and exhales, each time feeling your entire chest area *and* your belly rise and fall. You may note that a wave of relaxation comes over you. (For some people this is more immediately perceptible than for others, but this awareness will likely evolve over time.)

With regular use, you will find that you're able to call up your natural relaxation response on demand by simply repeating this simple breathing exercise under any stressful condition, or when you are trying to sleep. With time, as you cultivate these skills, you will develop better self-control and self-confidence and more harmony with those around you.



These are the four types of sessions, each progressively moving into deeper states. As mentioned earlier, if you're new to meditative practices, we suggest you start with the first group—the Alpha Sessions.

### Alpha I through VI

For use on a daily basis. Ideal for cognitive enhancement, light meditation, relaxation for sleep enhancement, afternoon power napping to help increase productivity, focus, attention, enhancing sexual performance (through stress reduction), and overall energy levels. Useful before, after or in between learning sessions; before going in front of groups of people; or for improved sports performance.

### Theta I through IV

Best for morning or late afternoon sessions for meditation training, reaching deeper consciousness states, opening the heart, generating overall feelings of love and acceptance within one's life. Can lead to deeper sleep states, more vivid dreams, lucid dreaming (*see section on lucid dreaming*). Excellent for visualization, balancing the left and right hemispheres of the brain, opening and enhancing creative processes, deepening learning, and being in touch with one's inner being.

Learning to enter deeper states is more than choosing a deep frequency session. If you go to the gym and choose a weight that is too heavy for you to lift, there will be little or no benefit. It is more effective in the long run to start small and work up to build strength. The same holds true for the mind. Take it a step at a time moving toward the deeper sessions with time.

Because theta is an elusive state usually held for only brief moments, it takes practice to remain in this state for extended periods. Each individual is unique, so progress at a level that feels good to you. There is no need to rush—every time you use MindSpa, you will be adding to its overall benefit.



### Deep Wave Delta I through III

These sessions can be used in conjunction with the blue light mode, and together can serve a number of sleep-enhancing functions. Use the blue light modes to suppress the release of sleep hormones and to reset the body clock. Ideal for use when traveling long distances by plane, and after arrival at your destination, to balance the effects of jet lag. Please refer to our section on internal body clock, and check our website for additional advice on sleep, circadian rhythm, and jetlag to learn best uses of these sessions along with blue light.

### Beta Sessions I through IV

The first set of three sessions starts at low beta frequency and rises to high beta. The second set of sessions starts at high beta and moves to low beta.

These act as a sort of stretching exercise for the mind. We recommend use once every two to three days. On alternate days, it is fine to use any of the alpha, theta or delta relaxation sessions.

You can alternate between the low to high and high to low sessions. You may find you respond to one set better than the other. Use the sessions you respond best to.

*Low to high beta:* For energizing, increasing alertness and attention, and overcoming negative states (best in conjunction with other minor alterations to lifestyle such as diet and exercise; please visit our website for further information).

*High to low beta:* For focus, concentration, cognitive and memory enhancement, test preparation.

If you want to try higher beta sessions, there are some available on our website.

For further information on use of these sessions or in other available sessions, refer to your MindSpa User Manual, or please visit our website [www.avstim.com](http://www.avstim.com)



## Additional Tips for Successful MindSpa Use

**Tip 1:** Establish a routine to use MindSpa every day, such as right as you wake up in the morning or mid-afternoon.

**Tip 2:** Take MindSpa with you to work, school or while traveling and keep it accessible. If time is short, even a few minutes of use can be beneficial.

**Tip 3:** Use a cue such as an alarm on your phone to remind you to use MindSpa at that time every day until you establish a regular pattern.

**Tip 4:** If plan to use it for 20-30 minutes in the mornings before heading to work, set a nightly alarm reminding you to go to bed at an appropriate time to wake up with ample time for use.

**Tip 5:** If you use a calendar, put a check mark next to days you use MindSpa to measure your progress and to keep yourself honest about how much you have used it.

**Tip 6:** Keep MindSpa in plain view of at home or work, such as on your nightstand or desk. It can be easily forgotten when placed in a drawer. Keeping it where you see it increases its accessibility, which in turn will increase use.

### Interrupted Sessions

While we encourage you to schedule sessions where you won't have any interruptions (just as you would meditation, exercise, or other self-care practices), no harm is done if you must unexpectedly stop your session before it is over because of an unavoidable interruption. You might feel slightly groggy, or even unsettled or jarred, depending on the nature of the interruption as well as the depth of your state. If you can return later it is best to begin the session again.



## Light Color Therapy (Chromatherapy)

Light color has a direct effect on our physiological and psychological condition.

Each of our sessions utilize four variables:

1. Light flicker frequency
2. Light pattern
3. Light color
4. Sound frequencies.

Our sound frequencies correlate to our light frequencies using what are known as binaural beats. These are two slightly uneven tones introduced into the left and right ear. The difference between the two frequencies generates a third frequency within the brain. We also utilize isochronic tones, which are single, individually spaced tones for brainwave stimulation.

**White** is the most common color for brainwave entrainment as it equally stimulates the rods, cones in the retina.

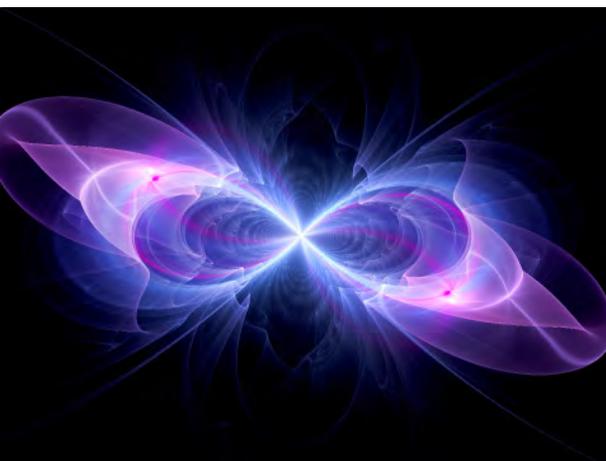
**Blue** light regulates our light/dark cycles. It is actually the blue sky component in sunlight, known as the action spectrum, that directly impacts sleep/wake physiology.

**Amber/Red** Colors in this spectrum have minimal effect on our body clock and are appropriate for night use. Red can have a gentle stimulation effect depending on the individual.

**Red/Blue** Specific bands of red and blue in combination are shown in research to reduce what is known as alpha and alpha-theta brainwave activity associated with feelings of reduced mental and a drop in physical energy levels particularly in the afternoon.

**Green** light is valuable in several ways. Recent major university research suggests that specific color bands of green light can be helpful in reducing the pain intensity and discomfort associated with migraine headaches, known as Photophobia, by as much as 20%. Additional recent major research suggests that green light can lead to very rapid sleep onset.

**Sunrise/Sunset** protocols utilize a proprietary blend of colors to emulate sunrise and sunset in a natural setting to help properly align sleep patterns. These are excellent sessions particularly where winter light is at a minimum to help promote both wakefulness and quality sleep, and help to overcome the effects of jet lag.







## Stress Hormones

Cortisol is known as the stress hormone and works along with adrenaline and other hormones to increase heart rate, elevate blood pressure and temporarily boost energy supplies by increasing bloodstream glucose. But under chronic conditions, this stress response can come at a physical cost that leaves us feeling worn out and tired, because the body is pumping out energy in bursts instead of a regulated pattern.

Imagine for a moment being in the jungle chased by a predator. We need all the instant energy we can muster until the threat is no longer there. The fight-or-flight response, as it is commonly called, changes our physiology by altering our immune response and suppressing non-essential functions such as digestive, reproductive and growth processes so all that energy can be focused on muscle activity. This natural alarm system also acts on the brain to control mood, motivation and our fear response associated with the high-amplitude beta state of brainwave activity.

Under normal conditions, the body's response to stress is self-limiting. Once a perceived threat has passed, hormone levels return to normal. As adrenaline and cortisol levels drop, functions return to baseline levels, and the body resumes regular activity.



## Impact on Health

In today's environment, many of us remain in a constant state of "threat" or stress. Work, family, finances, relationships, traffic, noise, time demands, performance demands, win-lose scenarios, and so on can place chronic stress on us and even our children. When we are unable to maintain control of our stress levels, these issues can be processed as perceived threats to the point where we feel overwhelmed and constantly under mental assault.

The result is we can *remain* in fight-or-flight mode, and we begin to adapt to this unnatural state of constant high amplitude brainwave activity. We can end up living this way until it begins to feel "normal"—but at a cost to our health, sleep patterns and well-being.

Unfortunately, many of us operate in this *fight-or-flight* state far too often due to the pressures modern society places upon us.

When the uneven, high-amplitude brainwave state is maintained for extended periods, it leaves us feeling drained of energy. Over time it can erode our physical and emotional well-being. The result is a cascade of mental and physical health and sleep issues. Sustained fight-or-flight states can also drain us and make us feel depressed and lethargic.

Compounding the problem, it's common to compensate by developing unhealthy eating habits and avoiding exercise, both of which can aggravate these issues and add new ones into the mix.

Stress can cause anxiety, insomnia, depression, digestive problems, heart disease, weight gain, and memory, concentration impairment and shortened life.

Other than perhaps a long vacation away from all forms of harmful stress, returning to more healthful, natural patterns of response to stress is actually relatively easy to achieve. It is a process requiring a minimal amount of daily commitment and some slight but meaningful changes to lifestyle.



## Yes, There's Sex Too!

Media and the airwaves are filled with commercials for sexual performance pills and products. Healthy sex centered around one's mate and/or oneself is about pleasure, relaxation and release, so of course stress plays a key role.

Throughout recorded history, the tie between meditative states and our pleasure centers have been well documented—the Kama Sutra being the classic example.

Some people reading this might be thinking, “Yes, but my problem (or my mate's) is different—it's medical, not stress-based.” But many medical issues *do*, at least in part, involve stress. In so many cases, medical and health issues share common chronic threads: lack of exercise, use of alcohol or drugs in place of proper relaxation techniques, and poor eating habits, to name but a few.

There are reams of published research pointing to the fact stress (and its management) factors greatly into to our health, our well-being and our sexual performance and satisfaction.

Therefore, regular practices that promote relaxation and stress release are bound to have a positive impact on this vital element of life.

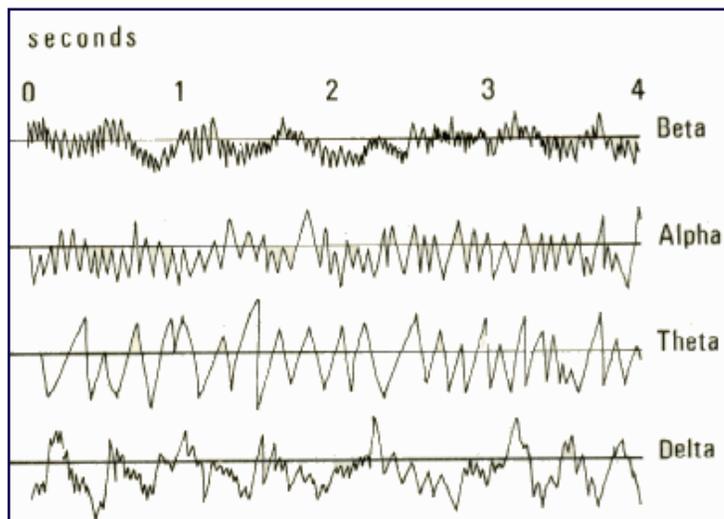


# Brainwave Primer

Brainwave frequencies are measured on two scales: cycles per second, also referred to as Hertz (Hz), and amplitude, which refers to intensity. Ocean waves serve as a familiar model demonstrating cycles (wave frequency=cycles) and amplitude (wave height=intensity).

Our brain operates primarily in five brainwave frequency bands. Each state serves a different purpose:

- **Gamma brainwave state:** Heightened consciousness and cognition.
- **Beta brainwave state:** State of normal awareness, wide awake and active.
- **Alpha relaxation state:** The calm, focused and creative state.
- **Theta brainwave state:** The low-wave deeply meditative state.
- **Delta brainwave state:** Ultra-low-wave, deep, dreamless, physically restorative sleep.



## Gamma brainwaves

Measured from approximately 30 to 100+ Hertz (Hz) or cycles per second. Gamma is associated with heightened cognitive activity and related to consciousness, attention, learning and memory. Though scientists have studied gamma oscillations for over five decades, it is still very much an area of active research with much to still be learned.

For example, studies at MIT and other leading institutions suggest gamma oscillations are important for controlling how we perceive stimuli. They might serve to make a sound seem louder, or visual input brighter, based on how these patterns regulate brain circuits.

In other studies, the meditation activity of novices was measured against that of monks who have meditated for years. In the novice group, there was only a slight increase in gamma wave activity while meditating. By contrast, some of the monks produced the most powerful gamma wave activity ever recorded. The monks who had spent the most years meditating had the highest levels of gamma wave activity.

What has been uncovered, particularly in the past decade, is that the trained brain is physically different from the untrained. This points to the importance of meditation-based mental training as a part of every life.

Gamma states are entered indirectly through ongoing alpha and theta state training. Our sessions focus on beta, alpha and theta state training.

### **Beta brainwaves**

*Measured from approximately 13 to 30 Hertz (Hz).*

Low- or moderate-amplitude beta corresponds to our normal waking state of alertness, in which the vast majority of routine thinking and physical functioning occur.

High-amplitude, fast beta generally reflects a state of either heightened mental activity or beta displayed in inconsistent patterns (imagine a brainwave “storm”). This state can indicate anxiety, stress, feelings of agitation and discomfort, and mental over-activity. This beta state is associated with the “*fight or flight*” response and can be related to the release of adrenaline and cortisol.

### **Alpha frequencies**

*Measured from approximately 8 to 13 Hz.*

This represents a relaxed state associated with external attention. The higher-Hz alpha range is the wakeful state of relaxed and effortless alertness. Lower alpha wave activity is associated with deeply relaxed meditative states.



Alpha waves are utilized for mental rejuvenation, accelerated learning, the creative process, and peak performance in all areas of life including education, business, sports and the arts. We can enter into the alpha state during lightly meditative, reflective activities such as reading a good book. Relaxation-inducing activities such as exercising or going for a quiet walk or ride in the country are other examples of activities that can induce an alpha state.

### **Theta frequencies**

*Measured from approximately 4 to 8 Hz.*

Theta represents the deeply relaxed state of free-flowing inward focus. It's an elusive state we naturally enter for a few minutes just before falling asleep and just before waking, when vivid internal imagery is produced without conscious effort. It is also the deep, advanced meditation state and the seat of the creative process.

The doorway to theta is through entering the alpha state on a regular basis. Under normal circumstances, we will move in and out of the theta state for several seconds to a few minutes at a time.

The famous inventor Thomas Edison frequently took afternoon naps, finding them particularly helpful when confronted with a difficult problem. He developed a technique in which he would sit in a chair holding steel balls in one hand above a pan of water. Just as he dozed off, his hand would relax, releasing the balls. As this woke him, it allowed him to reflect on his thoughts while in that twilight state between alertness and sleep—a short theta power nap.



### **Delta frequencies**

*Measured from approximately 0.5 to 3 Hz.*

This state is where the majority of physical and deep mental regeneration takes place—the dreamless, restorative, deep-sleep state. The delta state is entered through the natural sleep cycle. Delta is also the state long-time meditators enter and are able to maintain almost at will. In various spiritual texts, it is considered the entry into the transcendental state.

As we age, we spend far less time in the delta state while asleep than we did as children. Infants, for example, can spend most of their sleep cycle in deep delta sleep. By the time we reach middle age, this can fall below 20% of our total sleep cycle.

As we reach a mature age, delta can drop to below 10% of our total sleep cycle. However, vigorous daily exercise at any age will tend to increase the percentage of restorative delta sleep we receive. Alcohol will tend to disrupt slow wave sleep, so avoid or minimize its intake in the evenings and especially toward bedtime.

MindSpa, through the meditation process it promotes helps to train the mind to enter a deep state of relaxation effortlessly that will lead toward more effectively being able to reach the delta state and reap all its benefits to your health and well-being.



# The Five-Element Program

The MindSpa system is even more effective when you review all aspects of your life as an integral part of a simple but effective five-element program. Making small, incremental changes in these five areas of your life can have a major impact and lead you to a better overall quality of life:

- **Diet and Nutrition**
- **Exercise and Light**
- **Proper Rest**
- **Solitude**
- **Introspection**

We will cover some key aspects of these areas as they relate to the MindSpa, and we encourage you to investigate, explore, and consider each area more deeply on your own to further your success.

## Diet and Nutrition

Good nutritional habits are one of the five keys to a better quality of life. We have more access than ever to high quality advice and knowledge in this area.

Stress is one of the major causes of obesity. Using MindSpa to reduce stress can actually translate to long-term weight loss, because reducing stress reduces the mood changes, hormonal changes, and poor choices that often result from exhaustion, sleep disruption and the desire for “comfort food.”

An unhealthy lifestyle devoid of proper nutrition, exercise and rest can become a vicious cycle, with each aspect feeding upon the others.



For stress reduction, better focus, better sleep and memory, you can have a positive impact by choosing to eat healthy, high quality foods whenever possible. You have heard this before... Avoid junk food and empty calories.

Making even the smallest reductions in your intake of stimulants such as caffeine and alcohol can help. This can be as simple as skipping that coffee refill or second drink. Think before eating or drinking!

Invest time in becoming more knowledgeable and commit to yourself to make good choices more often. Your body will appreciate it.

## Exercise and Light

For stress reduction and health, exercise goes hand in hand with good nutrition. Exercise can take many forms. Even the simple act of walking just a few minutes more per day will pay dividends.



We can reap profound benefits from regular physical activity. If you are not exercising now, it's something you can easily work up to. You don't need to run out to join a gym or purchase equipment for success. Start with 10-minute walks each day. Park at the far side of the lot instead of parking as close as possible to your location. Walk up stairs instead of taking the elevator. Purchase one of the numerous fitness-tracking devices now available on the market to help make sure you're reaching your goals, and to track your improvements. Little steps lead to big positive results!

Recently published U.S. federal core guidelines recommend that we get about 150 minutes of moderately intense activity per week. This can include household chores. However, even a minimum of 75 minutes of higher-intensity exercise per week is believed to be beneficial. If you have the opportunity to build up to more strenuous exercise of at least one hour per day, all the better.

Many kinds of aerobic, muscle-building and flexibility-enhancing activities offer benefit. If you are maintaining 150 minutes per week of exercise—which can include activities such as gardening, yoga, walking, running, biking, swimming—you’ll benefit from a 25 percent reduction in health risks, according to studies. If you are able to devote between 150 to 300 minutes per week, according to published medical studies, the health-risk reduction is an astounding 40 percent!

If your lifestyle does not allow five days of exercise at a minimum of 30 minutes per day, there are other options. Develop a schedule of two weekend days and one weekday of 30 minutes per week. Get up from your chair or sofa more often and take a short walk. It is recommended we get up and move around every hour for maximum efficiency.

Outdoor exercise in particular offers another very valuable element: natural light. Light has a tremendous positive impact on our overall emotional and physical well-being. Especially in the winter months, light is a critical health and well-being supplement.

Our physiology is light-based, controlling hormone release and affecting our sleep-wake cycle. If you are conditioned to wearing sunglasses when outdoors, reduce their use to allow yourself higher doses of beneficial light. *(For more information, please see our section on internal body clock).*

Think of every form of exercise as a reinvestment into your long-term health and well-being, which helps to reduce stress, improve sleep and makes you just feel better.

The American College of Sports Medicine provides excellent guidance, including several online exercise videos, and a series of helpful assessment tools here: <http://www.myexerciseplan.com/assessment/>



## Rest and Rejuvenation – The Power of an Afternoon Nap

A number of published mindfulness-based studies by some of the most prestigious universities—Harvard, MIT and Stanford—have shown how taking afternoon breaks improves cognitive functioning and productivity.

No matter how demanding your life is, you can live a better life and get more accomplished in the long run by creating a small block of time every day for a little rest and rejuvenation. Rather than thinking of it as downtime, think of it as something that will actually make your day more productive and increasing both longevity and life quality.

You can devote as little as 20 minutes a day. One recent study even found benefit in six-minute relaxation sessions. It can mean taking one break during the day for a power nap. Your MindSpa can play an integral role in this part of your quality of life improvement program.

Again, we are suggesting you consider small, incremental steps. In most cases, it is within your control to improve your quality of life by making these slight adjustments. For example, consider slightly altering your sleep pattern by going to bed just a little earlier, even if it's just 15 or 20 minutes per day.



## Solitude

Do you find time to completely disconnect from the outside world? In the not-so-distant past, it seemed people had many more opportunities for solitude compared to our hyper-connected society today. There are so many more options to fill our time nowadays. Yet solitude helps us maintain balance in our lives. Solitude tends to be under-valued in modern life but has many personal mental and physical benefits.

The outdoors is one of the best places to find solitude. Connecting with nature allows you to reconnect with your inner self, which is where we find true peace. If you live in an urban area, you may not be able to get completely away from people, but most urban areas have parks where you can be alone with your own thoughts. Don't underestimate the power of solitude in helping to improve your quality of life.

## Introspection

The fifth element is the simple act of reflection—paying attention to your deepest internal voice. The simple but powerful act of quiet reflection, exercising stillness of thought so you can listen to that voice deep inside of you will create tremendous benefit.

It is that deeper voice that ultimately assists in guiding each of us through life. This occurs often through our dreams and activities such as meditation or quiet prayer. One profound doorway to such reflection is through alpha state relaxation.

**Y**ou can decide what is best for you and choose your own path. However, adjusting your lifestyle by integrating small but significant improvements in each of these five areas will maximize the benefits of MindSpa and add up to a better, more fulfilling quality of life. One of the benefits of using MindSpa is that it helps you to create new opportunities for a better quality of life, and to see how small changes in lifestyle can pay large benefits.



# Performance Guide for Business, the Arts and Athletics

## Mastering Calmness

A calm and balanced state is the ultimate high-performance state. For the purposes of definition, the kind of calm we refer to is a form of letting go of both mind and body for regenerative purposes. *Calmness* is a state of performance readiness where mind and body are in tune, ready to act in synchrony.

Calmness helps you view stress-producing situations from a new, more productive perspective. It allows you to thrive in the face of adversity. It helps you to create new options and new ways of responding to tough situations, allowing you to reach your ultimate goals. It is perspective that allows you to master your situation.



## Stress and Performance

Stress and how you respond to it are important factors in peak performance. Maintaining a certain edge can be positive, but too much stress impacts health, weight, performance, and sleep patterns.

Productive stress is like fine-tuning the strings of a violin. The strings and bow have to be under a certain level of tautness to sound just right. What produces a perfect performance is that precise

balance between too much and too little, the relationship between each string, the quality of the instrument and how that instrument is played. As humans, we too are finely-tuned instruments with many interrelationships to consider on our way to perfect performance.

Relaxing your mind allows more intent focus upon goals. Relaxing your mind allows you to function with less effort because you are expending less emotional energy. When your emotional state rules your thinking processes, anxiety increases and ultimately your performance suffers.

There are a number of classic exercises you can add to your relaxation toolbox. We describe several in the following pages. Utilize these exercises to help improve your overall success.

While we do recommend these, it's not required that you include these exercises while conducting a light and sound session. However, simple as they are, they can dramatically aid your progress, especially early on.

We recognize that you may be using some of these exercises or your own versions already, so feel free to incorporate them as you see fit. Give yourself time to master these exercises for maximum benefit.

## Developing Performance Breathing Skills

Learning to breathe for calmness and centering will help you be more effective, especially when you are in competitive pressure environments.

Performance breathing is also commonly known as *diaphragmic* breathing—breathing from deep in your abdomen instead of high in your chest. This is a natural way of breathing and the way infants and animals breathe when relaxed.



Partly as a protective response to threats or perceived threats around us, many of us regularly breathe from our upper chest rather than from the diaphragm. This is particularly true during times of stress.

When we're under pressure, we're also most likely to be out of touch with what is happening in our body and mind. As discussed earlier, as we become more and more stressed, we enter into the instinctual "*fight-or-flight*" response—our survival instincts kick in. Our breathing becomes quick and shallow, and our adrenaline levels rise. Adrenaline will pump us up temporarily, but soon will leave us feeling drained of energy.

## Exercise

**Start by taking a minute or two to close your eyes** now and imagine yourself in a situation that really stresses you out. Maybe someone you report to at work is causing distress; for many, public speaking is considered an extremely stressful situation. For the majority of us, driving in traffic, an argument with a mate, or nerves right before a major event will place us in fight-or-flight mode.

Whatever it may be, place yourself there right now. Make it as real for yourself as possible. After you have imagined yourself in that situation for a few minutes, read on and answer the following questions:

- What do you feel?
- Do certain parts of your body feel tense?
- What does it make you think about?
- Is your breathing shallow and high in your chest?
- Are you breathing a little more rapidly than usual?
- Do you feel anxiety in your stomach?
- Are your palms or forehead a little sweaty?

If you are able to experience one or more of these symptoms, congratulations! It means you are doing a great job of visualizing the situation. You are in touch with it, and you are now aware of your body and the physical and emotional messages it is sending to your mind.

Now, or at any time you are in situations where you are feeling anxiety, anger or discomfort, do the following diaphragmic breathing exercise:

Take a deep breath. Now bring your breath into your entire body. Visualize it actually entering your body as a soothing form of energy. (For some, seeing it as white or golden-white light works well.) Feel that breath move through your body and down into your abdomen. You know you are breathing correctly when you place your hand on your stomach and feel it moving up and down. Your chest should be relatively still during this exercise.

Follow your breath as it enters your nostrils and goes down into your lungs. Visualize it entering your bloodstream, moving up to your brain. Follow it as it brings relaxation to your body. Imagine this breath is giving you a boost of life energy. Feel it as a purifying force that clears out all anxiety and negative feelings, replacing them with calmness and serenity.

Conduct this exercise slowly and deliberately. Breathe slowly three, four or more times over next minute or so to get a good sense of the exercise and the power it gives you. You should notice how it quickly relaxes you and releases tension and anxiety.

This is a skill you can use any time and any place. When you use this exercise with your MindSpa on a regular basis, it will help condition your mind and body to automatically release you into a relaxed and focused state.

This exercise, and exercises like it, can become imprinted at a deep level in your memory. With regular practice, these practices will become instinctive. Later on, try this practice for a longer period of time, and try it during any MindSpa session. Also, at times of emotional stress, you can call upon this exercise to help center and focus yourself.



## Developing Focus Skills

You have probably experienced at some point the need to stay focused while performing a challenging task, and at times you've probably found it difficult and frustrating.

Compounding the problem is that our instinct is often to *tell* ourselves—our left brain—to remain focused, and this can actually disrupt the state and cause our focus to fall off, resulting in a break of concentration.

Thinking about the past or the future throws us off task. Staying in the moment is one of the most important life-empowering skills we can develop.

Focus is about being in the present moment—what we might refer to as the mindfulness state. When in the moment, staying completely on task, we become naturally free of internal and external distraction.

Many people find focus through their personal passion or talent. If you have already tapped into your true passion, you are among the fortunate. You probably find it easier to focus than most, at least when engaged in activity related to your passion. It seems almost a natural outcome.

Most of us are talented individuals with great but untapped potential. It's up to us to not only discover our own innate talent but to believe in it and act on it when we find it. Life is short and very precious. If we wait for something to change, we could be waiting a long time. The courage to pursue our passions is something we need to find within.

If you have not yet found your passion in life, or are not pursuing that passion, MindSpa is exactly the right product to help you tap into your inner resources. Use your MindSpa, along with these exercises, to travel a journey into self-discovery.



## Exercise

### Tensing and Releasing

The practice of tensing and releasing is a highly effective method for releasing physical tension. Here is an exercise you can do during any MindSpa session for relaxation and rejuvenation.

Center your attention on individual parts of your body. You can start from the top of your head and work down. As you progress through each area of your body, physically tighten your muscles. Hold this position for a few seconds, then let go and move on to the next area. Remember to continue to breathe as you conduct this exercise.

Start with your head and neck. First take a slow, deep breath and tense up, but not to the point of pain. Hold for a few seconds. You may continue to breathe while maintaining tension. When you feel ready, exhale deeply as you release tension and be conscious of how you feel.

As you move to the next area of your body, take a deep breath. Move down to your shoulders, arms and hands, then the chest area and middle back region, down into the abdomen and lower back, then to the buttocks, the upper legs, lower legs and finally the feet and toes. You can also start with your toes and work your way up.

You can take as much time as you like to complete this exercise. However, when time is a factor, this exercise can be effectively completed in as little as 10 to 15 minutes. It can be highly effective to help you let go of body tension and move into a performance state, or to help you move towards restful sleep when conducted before bedtime or if you find yourself unable to fall back asleep in the middle of the night.



## Progressive Muscle Relaxation

This practice is similar to tensing and releasing, except in this exercise you are focused only on the releasing. You should also give this exercise more time, as it is more subtle and requires extra time to feel and work through each muscle group.

### Exercise



Start with the forehead and take deep, complete breaths. Let the muscles relax. Then go to the eyes, cheeks, and back of the jaw, allowing your lips to part slightly. Let your tongue fall and allow it to flatten out. Move to your chin, then the back of your neck. Feel all the muscles back there. Feel your internal organs begin to relax. Now work on the base of your neck, then your shoulders, arms, hands, fingers. . .

Keep releasing each zone of your body; find the tension or “holding” spots and just let go. Do this in conjunction with slow, deep abdominal breathing.

While you are doing this, you can notice what thoughts arise. Acknowledge them and let them go along with your tension, like clouds passing on a lazy summer sky.

This exercise should take you at least 20-30 minutes. It is a terrific body-awareness exercise and can also help you locate particularly tight spots.

Any of these exercises done together with your MindSpa sessions will enhance the sessions’ effectiveness. You will experience an increase in your energy levels, improved ability to stay focused, and better performance.

# Imagery and Visualization

This is one of the most important sections to read and understand. The skills you learn here can take you deep to the heart of what generates highest performance.

To enhance performance, nearly every professional top-level athlete uses imagery and visualization in one form or another. Many coaches have long understood the power of these mental exercises to tap our full potential. Knowing how to use these exercises properly can have a profound influence on your performance.

Some trainers, sports psychologists, and noted authors treat imagery and visualization as the same exercise when, in fact, they are different in a fundamental way. Imagery is a deeply subconscious experience. Visualization takes place at a more conscious level. Understanding the differences, and understanding how to use both, can make a difference in reaching and maintaining high levels of success and accomplishment.

## Imaging

Imaging involves using your mind to create or recreate the result you intend to produce. When accomplished properly on a subconscious level, your body and mind are living the experience. The electrical activity in your muscles mirrors actual performance. Your emotional state is firmly rooted in the imagery you are producing.

To your subconscious mind, there is virtually no difference between the imaging of the experience and the actual experience. You are immersed in seeing, feeling, smelling, and tasting the activity in your mind.



The power of imaging provides you with a key to open up your full potential. At the subconscious level, when you can begin to see and live as the person you are capable of being, you will become that person. You can move from a state of *wanting* to a state of *being*. This is actually an ancient concept; in some philosophies this has been described for eons as a state of purity.

Internal imagery is most effective. Picture yourself actually accomplishing the feat (from your mind's eye), rather than viewing yourself from the outside looking in.

To appreciate the power of imagery and visualization, consider one of the greatest all-time athletes: Muhammad Ali. He was a master imager and visualizer. He not only saw himself as the greatest of all time, he “lived” it even before becoming it. For him, the imagining went beyond thinking or wanting. He saw himself as the greatest boxer ever, at the deepest levels of his whole being, even before this became manifest.

His vision was clear, and he shared it with all who would listen. He never wavered. He let everyone know, especially his opponents: “I AM THE GREATEST!” But he wasn't just saying it. He was *being* it, and he was able to create the reality he envisioned.

Losing a match later in his career did not diminish this for him. He intuitively knew that his greatness was tied to something within himself. Winning was not his first goal; rather, it was the result of his determination to simply be the greatest.

What is also remarkable was the way he could use the power of his mind to influence his opponents' states. For the majority of his career, Ali won most fights before he ever got into the ring, and his opponents lost before the first punch was ever thrown. His visualization was so powerful that it affected opponents' images of themselves as well as his own.



## Exercise

### Using Self-Guided Imagery to Improve Performance

As mentioned, imaging takes place at a deeper level than visualization. The more deeply relaxed you allow yourself to become, the more vivid the imagery.

During a MindSpa session, start this exercise by visualizing a picture of your performance. Build the picture, build the scene, make it big, place it right in front of you, and bring all your senses into it—taste, touch, smell, hearing and seeing.

Once it is clear, enter the picture and become fully part of it. Become aware of how you and your muscles are feeling, your energy level, your surroundings, other participants, sounds, smells, temperature, and light. While deeply relaxed, make the image even more real, noticing little things that might pass you by when you are actually performing. Observe everything to its fullest.

Now you have choices. In your image, you can go directly into your performance, working through the various aspects of your performance, doing it perfectly and seeing yourself succeed. Or, you can imagine your way through all the activity leading up to your performance, noticing everything that goes on around you, and then “enter” your performance.

As you sense the session is nearing the end, slowly allow yourself to drift back into waking consciousness. Give yourself a little praise. Let your inner self know you can succeed at any level you choose. You can rise to new, higher performance levels. If and when a negative voice enters your consciousness, recognize it for what it is: a product of your mind and your ego, something you don't *have* to pay attention to and can simply let go of it.

When using MindSpa to help you enter deeper alpha and theta states, your subconscious mind is more open to suggestion. In these states, the subconscious acts much like a dry sponge soaking up water. It is at this level, beyond your normal ego, where you meet your true confidence and your true intent speaks to you with honesty. If you are having performance blocks of any kind, it is at this level of consciousness that you may find they are self-imposed—an influence that you can choose to change.



## Visualization

Visualization is another equally important form of mental practice. Visualization is the act of using your mind's eye to see yourself perform an activity. It is not as immersive as the imaging described above, where all of your senses become totally involved. It is more of a “watching” yourself than experiencing it. Still, it too can be very effective in helping improve performance.

### Visualization: Closed-Eye Method

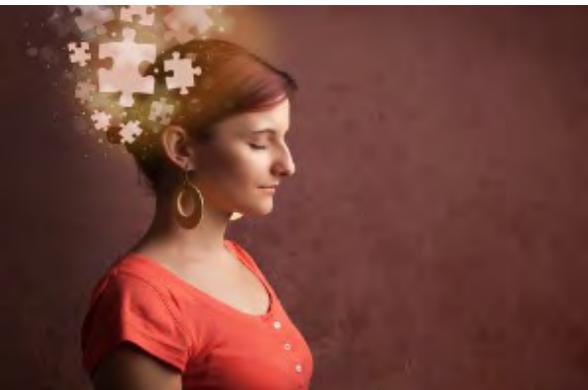
Before you begin, pick one aspect of your skill that you feel needs improving. Start out with something small and workable; save the big changes for when you really start to build your confidence and ability.

## Exercise

Begin a MindSpa session. Take your time with the session. Allow it to release you to a point where your mind is clear and empty of daily thoughts. When you are really feeling relaxed, bring a picture of your ideal performance into focus. Now, make that picture larger and more colorful. Now make it brighter. Go back again, making it even larger and more colorful and brighter in your mind until it starts to become real. Center that picture; bring it into sharper focus in your mind's eye. But don't force the exercise, as that defeats the purpose. Enjoy the process; make it fun!

Now hopefully you have a fairly clear picture—or, if it is not a clear picture, you may have a fairly clear feeling of being in the activity. (Some people are more “feeling”- than “seeing”-oriented.) Your normal thinking is slowing way down. Just observe your feelings without trying to change them. Allow the entire picture to flow through and around you.

Return to this practice day after day. See yourself in the same situation, overcoming blocks and reaching new levels of performance. You are using the power of your own mind to reach further than you ever “thought” possible, simply by letting go of conscious thought.



## Exercise

**Another visualization alternative to try:** Versions of the following have been in use for centuries: imagine a golden light emanating from the top of your head, or coming into you from outside and traveling through your body. See it as a protective shield for you, your family, and your friends. See it grow and expand around you getting stronger and brighter. Follow this with slow, deep breaths as you practice this technique. This particular technique can be practiced for a few seconds or a few minutes any time, night or day.

### Visualization: Open-Eye Method

By now you have practiced using your MindSpa and are beginning to know what it feels like when you move into a meditative, focused/relaxed state. Take the first few minutes to allow yourself to reach that state.

If you are a performer, giving speeches, involved in athletic competition, or pursuing other performance-based activities, start a video of yourself performing at your peak, or of someone else you admire performing at their peak. Watch the tape with a non-critical mind. Be a disinterested observer. Let go of analytical or judgmental thoughts. Just stay in your relaxed state and allow your inner mind to absorb.

You can also use this with a tape of a performance you are not happy with. Watching the tape with a non-critical mind is the key. Just accept the performance for what it was. At a deeper level, below thinking/analyzing, you will be able to absorb the performance and reach beyond it in the future. If your intent is to use past performances to create a higher level, then it all becomes part of one positive experience.



## Affirmations and Self-Talk

Great performances and great performers develop in part by using internal dialogue in the right way. Knowing how to use and create positive affirmations—self talk—can have a profound influence on your success.

It's important to become fully aware of what you say to yourself and, just as important, how you say it. Every word you say to yourself has a level of power and meaning to the subconscious mind. Throughout your waking hours, consciously or subconsciously, we are constantly running scripts and subscripts in our mind that are both positive and negative in nature. Becoming aware of the correct way to run these scripts is a tremendous tool for performance enhancement and creating the outcome you consciously seek.

The subconscious part of the brain receives communication in a very simple, straightforward manner. Rather than “importing” words, it works on a much more fundamental level. It feels emotional content and sees the image attached to a thought. It does not “filter out” negative sayings, but registers “trigger words,” along with the emotional feeling and visual pictures.

For instance, to say “I will not fail again” is registered by our consciousness in a simple visual/emotional form with *not* and *failure* as the keywords. The emotion being provided to the subconscious is that which is associated with remembering and seeing a past failure. This can and does then re-register in the conscious brain as a troublesome, underlying feeling of failure without being able to put your finger on its source.

It is far more powerful for your internal dialogue to be focused on the goal, and to see that goal as something within reach. A positive emotional/visual image of moving towards success allows you to put the innate power of your mind to best use.

That said, positive and negative affirmations can both have a powerful influence on your performance.



Affirmations are best absorbed under circumstances where your mind is relatively still and quiet, such as while using your Mindspa or shortly after your session. The best affirmations are short, clearly defined and positive.

We offer below some simple but powerful tips for creating and constructing affirmations properly. Correct construction techniques will have broad positive impact. This is a form of mental practice worth developing that can change your outlook on life and produce remarkable results.

## Constructing Personal Affirmations

### Keep affirmations short

Short, simple statements work best. This is because simple construction makes it easy for your subconscious to absorb the visual/emotional content.

### Make them clear

Clarity is important. Affirmations need to be specific in nature and easily understood so that the content fixes itself in your subconscious.

### Focus on the positive

Be aware of the words you use and the power they carry. Avoid negative words completely rather than try to use them in a positive way. (See examples on page 50.)

### Make them realistic

You have to be able to believe in what you are saying to yourself for affirmations to be effective.

### Construct them in the present tense

Staying in the present moment helps you remain focused. It also helps you avoid constructing negative statements based on past performance.



### **Say your affirmations out loud to yourself**

Bringing your auditory processes into this activity makes affirmations more effective.

### **Write them out**

The physical act of writing helps fix affirmations in your mind. This is an important exercise because it brings not only the visual and auditory dimensions but the kinesthetic into the activity as well. The more senses you bring into the process, the more effective this exercise will be.

### **Review them often**

Place your list of affirmations where you will see it and read it every day. In addition, update and review your affirmations on a regular basis so they stay fresh and current.

### **Share them with others**

When you are part of a team, work with your group or teammates to create a set of shared goals. Shared goals are well-known to create greater results!

### **Keep them positive and focused on you**

It's all too easy to focus on the negative we perceive in ourselves. It's also easy to look for weakness in others as a way to try to bolster our own self-image through comparison. However, this takes the focus off our own strengths, and subconsciously makes us focus on our own weaknesses. What we don't like in others is often mirroring a part of ourselves that we don't like.

While it's reasonable and helpful to identify and work to change legitimate shortcomings in ourselves, simply focusing on them—or those of others—isn't the most constructive use of our energy. If you see a way to be better or do better, by all means put energy into acting on that (rather than merely fretting about or negatively affirming it).

But be sure that you're recognizing and affirming that which is good, so you can amplify it and use it for good. And focus our energy on your own value, rather than on criticism of or comparison with others.



## Use your most important affirmations several times a day

Repeat your affirmations quietly to yourself throughout the day, especially when going to sleep or waking up in the morning and when doing MindSpa sessions.

## Affirmation Examples

Here are some examples of positive vs. negative affirmation constructions.

### POSITIVE

“I am a winner!”  
 “I act with decisiveness.”  
 “I am essential and capable.”  
 “I am smart.”  
 “I possess great inner ability.”  
 “I accept myself.”  
 “I possess inner strength.”  
 “Stay loose.”  
 “I am worthy.”  
 “I am a leader.”  
 “I am responsible for my success.”  
 “I possess limitless potential.”  
 “I am capable of success.”  
 “I see success in my life.”

### NEGATIVE

“I can’t allow failure to occur!”  
 “I am doing my best.”  
 “The team is counting on me.”  
 “How can I be such an idiot?”  
 “I am not as talented as some.”  
 “I don’t like myself.”  
 “I am weak.”  
 “I’m stressed.”  
 “I lack impact on the team.”  
 “I will try lead to us to victory.”  
 “Failure it is not acceptable.”  
 “I give it all I have.”  
 “How did I blow that?”  
 “I won’t let that happen again”.



When self-talking, watch out for words like *don’t*, *won’t*, *can’t*, *stop*, *should*, etc. These are self-limiting terms and place the focus in the wrong area—on the negative. Negative self-talk is generally fear-based, and is a very common way to move into (or stay stuck in) a defeatist mode.

Instead of trying to move *away* from possible failure, move *toward* success. Keep your attention on the positive and you will have a far better opportunity for success to become a reality.

When you're focusing on not doing something wrong, it creates emotional anxiety. Anxiety causes a loss of focus and a loss of concentration. If you make a mistake during an important event, immediately place your focus back on what you intend to accomplish. Take a few deep breaths, allow yourself to release the previous moment and immediately move back into performance mode.

When using words like "take" or "control," be aware that these words represent something outside of you. A better usage is a word like "release" or "bring." The sentence "I will take control of my life" might be better stated as: "I have the power to succeed in my life." When you speak of taking control, it tells your inner mind you feel like you have a lack of it. "I want something I don't have." Pay attention to statements of this style.

Additional examples of positive and negative short phrase beginnings:

POSITIVE	NEGATIVE
I Can	I Can't
I Am Able To	I Have To
I Have	I Want
Love	Hate
Today	Someday
Towards	Away
Opportunity	Problem
Challenge	Difficulty
I Am Able	I Will Try
I Do	I Don't
Relax	Stress
Possible	Tough
I Have Confidence	I Worry
Win	Lose
Possible	Impossible

## A NOTE ABOUT VISUALIZATION AND AFFIRMATIONS:

Change is possible, but goals have to be realistic, even if they are ambitious. Set realistic parameters. Make your goals attainable ones that your subconscious will accept. The key is to see yourself as what you are truly capable of being.

## Meditation Primer

Meditation is a practice anyone can benefit from. There are many forms of ancient meditative practice. Mindfulness is a modern offshoot of this practice, helping us integrate a sense of peace in our daily lives. Auditory/visual stimulation and practices that include its use can produce many of the same effects and results, both physiologically and psychologically.

Interest in and study of meditation and mindfulness keeps growing exponentially as we learn more about these practices. Hundreds of peer-reviewed research papers on the effects of meditation on the brain and body are published each year. Currently there are over 3,000 published studies demonstrating that regular meditation practice can lower anxiety, increase productivity, improve sleep and memory, and reduce risk of heart attack—to name just a few benefits. To recap just a few:



A recent study conducted by The Wharton School and INSEAD (two of the world's leading graduate business schools) demonstrates that in the business environment, even 15 minutes of mindfulness meditation positively influences the decision-making process and helps employees to perform better.

Another study by George Mason University suggests that meditation practice before a college lecture can lead to better academic performance. The study suggests that meditation, even for less than 10 minutes, is particularly helpful to students who have problems with focus and concentration by improving mental clarity, focus and self-discipline.

There are direct correlations between physical exercise and mental mindfulness practices, showing that meditation changes the brain in ways similar to how exercise impacts the body. The mind is like a muscle: use it and it strengthens; leave it alone and in certain ways it will begin to “atrophy,” or our capacities will diminish.



For example, in a study conducted at Massachusetts General Hospital supported by the National Institutes for Health, subjects after eight weeks of meditation (practicing for an average of about half an hour per day) exhibited increases in gray-matter density in the regions crucial to empathy, learning and memory. Moreover, there were decreases in gray-matter density in the area that regulates stress and anxiety.

A recent study at Carnegie Mellon University found that just 25 minutes of meditation for three consecutive days is effective in alleviating psychological stress. Similarly, a study at Johns Hopkins University School of Medicine found that daily meditation provided as much relief from anxiety and depression as other studies demonstrated through the use of antidepressants.

On the same note, a pilot study by researchers at Beth Israel Deaconess Medical Center suggests that meditation and stress reduction exercises appear to play an important role in slowing the progression of age-related cognitive disorders like Alzheimer's disease and other dementias.

Another study at the University of Oregon found that craving for tobacco is reduced by 60 percent through a combination of whole-body relaxation, mental imagery and mindfulness training led by a qualified coach.

PTSD is now better understood than ever before, but is still a debilitating and costly issue. A study at the University of California-San Diego suggests that incorporating meditative practices into U.S. military pre-deployment training appears to be reducing rising rates of stress-related health conditions (including PTSD, depression and anxiety), within its ranks.

Many meditation techniques have been in constant practice throughout the world, in some cases going back to ancient times. Earliest records show these practices originating from the Buddhist, Hindu, and Jewish traditions. Aims of meditation can include strengthening specific mental abilities such as maintaining focus and attention; cultivating calm or equanimity; experiencing heart-based compassion; and attaining enlightened states. These days, even the modern medical community recognizes various forms of meditation, such as mindfulness-based meditation, as providing mental and physical health benefits.

## Using MindSpa with Current Meditation Practice

What we hear most often from people who practice meditation is that they feel they have hit a plateau, or that they simply find their mind wandering and feel like they are not able to get past that point. MindSpa can help with this and take a meditation practice past a rut or plateau, as well as help deepen the practice so it has even more impact and effect.

Some long-time meditators may initially find the use of technology a bit invasive. Initially, it can actually be more difficult for experienced meditators to enter deeper states than a novice with little or no meditation practice.

We suggest time and patience in incorporating auditory and photic driving into meditation practice. MindSpa offers a way to reinforce other relaxation-based practices. It can be a powerful complement to help the mind “break through” to deeper states.

Whether you practice meditation techniques, the outcome we’re aiming for is to guide you into learning how to influence or regulate your state at will during your normal waking life. This is to provide you with more choices in how you respond to events, and more empowerment in consciously living your life. This can simply extend to your meditation practice.

Following is an overview of just a few of the most popular and well-documented meditative techniques. You can easily incorporate these techniques with the use of visual and auditory entrainment to strengthen and reinforce your ability to enter deeper states. We encourage you to learn more about these techniques, their cultural significance and their history.

The strength of meditation practice is you can gain benefit with even a five- to 10-minute session. However, ideally practices lasts at least 20 minutes to half an hour, or an hour or more, depending on your experience and intention. If you are new to meditation, it’s a good idea to start with shorter sessions and work your way up to longer ones progressively.



Depending on your desired result, you can feel free to incorporate some of these types of meditation practices into your MindSpa sessions. Others may be done independently. Even when you do your own distinct meditation practices, you may notice that you're entering and maintaining deeper states—along with faster and better results outside of meditation—as a result of using MindSpa at other times.

### **Mindfulness Meditation**

Mindfulness meditation has its roots in Buddhist traditions. In essence, the purpose of this form of meditation is to lead one toward a contemplative life of wisdom and compassion through the practice of attention and awareness in daily life. It is a way toward spiritual awakening through which we ultimately see the true nature of existence.

Often we go through life lacking full awareness of what our physical or emotional bodies are feeling. We often have only partial awareness of the sensations we are experiencing and the thoughts that are flowing through us. This meditation brings us closer to truly being in touch with our minds and bodies by bringing full awareness to everything that arises.

### **Awareness or Insight Meditation**

In awareness meditation, the goal isn't so much being mindful of everything we experience but rather to have no preference for any particular experience—to let go of all agenda, effort, engagement and judgment for the period of meditation. The goal is to simply remain uninvolved with anything that's occurring during the meditation. Rather than try to quiet the mind, one practices having no relationship to the mind at all—no matter what it is doing. The mind may or may not be busy, and both the inner and outer environment may be noisy or chaotic, but in this meditation you practice allowing all of that to be as it is, without trying to change it or become attached to it. Your awareness is relaxed, neutral, and unmoved by any of the objects arising in experience.



## Exercise



This type of meditation can and often does have many of the effects of other meditations, such as a sense of calmness, peace, relaxation, etc. However, those effects are not its primary purpose. Its deeper purpose is to cultivate a fundamental equanimity with everything that arises, a sense of the self as distinct from the mind (unhooking the automaticity of reaction to thought), and through this ultimately an awakening to reality as it is rather than through our perceptions.

### One-Point Concentration

Often referred to as centering, this is a technique used to maintain focus and attention on a single object. This practice has a deeply calming effect, reducing both internal and external distractions.

There are numerous concentration meditation practices, potentially focusing on many possible objects. One example: focus all attention toward a spot at the center of the forehead just above the bridge of the nose. This goes back to the concept of *chakras*, or energy channels, which are said to move essential life force through the body. This point in the approximate center of the forehead is referred to in religious tradition as the *third eye* or *mind's eye* and is associated with the mystical and ancient. It is theorized to have a relationship to the pineal gland.

### Mantras

Another meditation-based exercise is the repeating of a word or phrase, sometimes meaningful and other times meaningless, as a way to shift consciousness toward deeper states. It is related to one-point concentration. The concept in both these methods is to cut out internal dialogue, with the aim of eventually reaching a state of “no-mind” where all internal thought ceases. At the moment this occurs, one is said to enter a state of perfect or pure consciousness, or total connectedness with the universe. This is the ultimate aim of many spiritual-based practices.

### Heart-Based Meditation

There have been numerous studies on the connection between emotional stress and major disease such as heart disease. One major study found that older individuals who felt they had personal control over their emotional states had nearly a 60 percent lower risk of death. Another highly-regarded long-term study found a direct link between emotional stress and a 40 percent higher death rate.

These are just two of the wealth of major studies showing that those with the highest self-regulating abilities have the greatest chances of living long lives without chronic disease.

Meditations visualizing love, energy or light through the heart constitute another ancient practice that is still popular in modern culture. This often involves visualization of the breath and the heart working in unison. In some disciplines, it is believed that the heart has its own “mind” and is communicating in a far more complex way with the brain and hormonal system than just regulating the pumping of blood.

## Exercise

There are various ways to practice heart-based meditation. One suggestion: Imagine your breath as light. See that light flowing through your body and your heart, with each breath. Feel its life force coursing through your body. Feel the synchrony between your breath and your heartbeat. Feel your love and compassion for those around you, and direct this toward the universe.

## Anchoring

Anchoring is the recall of a previous experience by using one element of that experience to bring back the entire experience. One of the purposes of anchors is to recall and place oneself in the same peak performance state that led to previous success. The use of anchors can help improve performance and consistency.

Many athletes unconsciously use anchors without realizing it. For example, often athletes repeat the exact same physical motion, like shaking their arms and hands in a specific manner before each competition. It is a common anchor that prepares the athlete to perform at peak levels.

There are endless anchoring examples. Anchors can be some small physical movement, or some possession that is touched right before the start of each competition, like a ring or part of a uniform. It can be a certain phrase a coach may use, or a touch by a coach on the shoulder that sets the anchor. It could even be a certain ritual that is followed before each competition, like the tying of shoes in a specific manner and order.



## Exercise

The anchor signals the body and mind to re-experience a previous event. Other examples of anchors include music and smells, which can provide powerful recall. It could be a song heard the first time you were with someone you cared about, which can instantly take you back to that experience. Or, it could be walking through a county fair and smelling something that instantly takes you back to your childhood. The olfactory sense is considered the most effective in memory recall.

### How to Create A Physical Anchor

Place yourself in a deeply relaxed state using one of your favorite sessions.

Remember the feeling, experience, and/or action from an event you want to anchor. For most, this is going to be a previous outstanding performance.

Use all your senses: see, feel, hear, smell, even taste the past event as vividly as you can. Immerse yourself in the event so when you look down you can see your feet and hands, and when you look up, you can see everything that is around you.

When you are completely in the experience, make it even brighter, add more color to it, feel the sun and air temperature, hear what is going on around you, become aware of every element so you are reliving the experience. The more you can add to your experience, the stronger your anchor will be.

Now that you are immersed in the experience, notice what positive things you are thinking or saying to yourself, such as: *I am relaxed, I feel ready, I know I am going to win, I can taste success!* You can also use individual words such as *Yes! Go! Great!*

While you are in the peak of your experience, say your word or words out loud in a strong, enthusiastic voice. Now create a physical anchor by touching a part of your body such as your wrist or a part of your face; tapping your foot; touching the top of the roof of your mouth with your tongue, or making a fist (just as examples).



Now let go of the anchor and gently come out of your experience.

To test if the anchor is working, break your visualization by thinking about something unrelated to it, such as what you had to eat over the last two days. Once you have mentally shifted to other things, activate your anchor. If it works, the feeling and experience you desire will come back. If you need to make the anchor stronger, repeat the previous steps and work to amplify the experience, making it even stronger.

Once you learn to create an anchor in this way, you can create as many additional anchors as you want or need. For example, use a session to place yourself into a deeply focused/ready state, and then when you're at the peak of your experience, create an anchor to recreate that exact experience of being focused and relaxed.

Also, begin to become aware of the anchors you are already using and continue to develop them.

This simple tool is extremely powerful and why the majority of pro athletes use anchors. You will learn how anchors can help you once you begin to consciously use it for performance.

Experiment with anchoring—it works!



## Exercise



## Posture

We communicate subconsciously to others through our posture. Our posture reflects our inner thinking. Any inner turmoil affecting confidence is reflected through posture. You can have an immediate and profound effect on your state of mind by shifting your posture, even slightly.

Try this simple exercise, and experience right now how effective correct posture can be. Pick up your shoulders and raise them up and back. Straighten your back. Lift your chest up and forward. If your legs are crossed, uncross them and place your feet flat on the floor, pointed at a slight angle out from each other. Now take a couple of slow, deep breaths. You will probably notice an almost immediate effect in the way you feel. Amazing! This is also a good standing posture to assume. Use this exercise the next time you are feeling a little anxious, uptight, or down.

Posture is very powerful when it is held with conviction. As you begin to feel confident, your posture reflects that.

When you look like you are trying to “posture” for others, it can have the opposite effect. Why? Because that type of posturing is fear-based instead of success-based. We read each other’s unconscious signals and respond to them.

As you become more aware of the positive and sometimes negative ways in which you carry your body, you can begin to carry yourself in a more positive fashion. As you practice, this will become second nature to you. This helps strengthen the all-important mind/body connection.

# Our Internal Body Clock

## Light and its value to you

Without light, life would simply not exist. Light is as key to life as air and water. The importance of light, and its effect on us, is far greater than most realize. Light plays a remarkable role in maintaining general well-being. Proper exposure to beneficial wavelengths of light is absolutely essential for health maintenance. We are light-dependent beings.

Scientists have long assumed that the eye has only one purpose: vision. We now know that seeing is only one of the eye's tasks, and that every cell in the body relies on the light brought in through the eyes.

This makes light as important a supplement as any vitamin, mineral, or antioxidant. You can learn how to make better use of light in your life through a few simple lifestyle changes.

Light is a powerful regulator of the human circadian system, our biological body clock. The circadian clock controls physiological changes that occur with the natural light-dark cycle of the day. Circadian rhythm disorders are among the major causes of sleep disruption and seasonal affective disorder (SAD), also called winter onset depression or the "winter blues."

A lack of proper daily light levels will disrupt our internal body clock. The circadian body clock responds to a relatively narrow band of blue light known as the "action spectrum." This blue light action spectrum, interestingly, correlates to the color of the blue sky. This blue light wavelength plays a major role in aligning and resetting the body clock through the control of release of hormones—including melatonin, the sleep hormone.



Light also regulates other aspects of health and functioning, and is crucial for those seeking high performance. For example, research findings at the University of Illinois report that athletes who received adequate light experienced a 20 percent increase in strength and athletic performance over those who did not receive adequate light input. Further research states that adequate exposure to light decreases lactic acid retention while increasing strength, energy, endurance and the ability of the blood to absorb and carry oxygen.

The brain uses light energy to expand its ability for learning, creativity, insight, processing of emotions, and productivity. The brain must rely on our ability to transform light into energy for survival.

As light rays strike the eye, photoreceptor nerves are stimulated and translate light into electrical impulses. Some of these impulses travel to the visual cortex where they create visual images that affect motivation. The remainder of these impulses travels to the hypothalamus, the part of the brain controlling the pituitary and nervous systems.

The nervous system controls stress, anxiety, reaction speed, and many other aspects of peak performance. Light impulses also travel directly from the eye to the brainstem, which controls equilibrium and the cardiovascular and gastrointestinal systems.

Yet in modern urban and suburban society, we have effectively cut ourselves off from natural light. Many work in buildings using artificial light that may disrupt our circadian rhythms. This can lead to stress, anxiety and chronic sleep issues.

We drive cars with tinted glass that lowers the transmission of beneficial light. When in the outdoors, many of us wear sunglasses, blocking beneficial light from entering the retina. The result: a significant reduction in the advantageous light frequencies that we need exposure to every day.



## Getting adequate light for better sleep, health and well-being

The specific blue light frequencies included with MindSpa are tuned to the circadian *action spectrum* (see pg. 68) and are an excellent supplemental light source. However, a few additional steps covered below can also make a big difference in your life.

The best way to properly set your body clock is simply by getting natural light during the day. We are most sensitive to light in the early morning and late afternoon. This should not be confused with getting direct sunlight. What you need is exposure to the blue sky. In hot or bright climate, you can sit in the shade; this will still allow you to receive the frequency band of beneficial light.

Getting adequate light can be relatively easy for most of us during much of the year. However, deficits are more pronounced during the deep winter months and for those living in the northern regions where light is very limited. In these instances, 30-45 minutes of supplemental light in the morning provided by your MindSpa system can make an important difference to your quality of sleep. Compared to overly-bright 10,000 lux tabletop light therapy devices, brightness in the glasses are effective at substantially lower levels because the light source is close to the eye.



### Take off your sunglasses!

If you wear sunglasses often, you are depriving yourself of beneficial blue-spectrum light. Most of us are overusing sunglasses and not recognizing that it has an impact on our health and well-being.

Many who work indoors put on sunglasses the moment they go outside, to compensate for the brightness. When light is blocked in this manner, the signal to the brain is that it is night or dusk. This causes melatonin to be released too early in the day, which can easily result in circadian sleep disorders and can worsen winter depression.

Try this little experiment. The next time it's nice outside, when you are in a natural setting such as a park or in the woods, pay attention to your mood and how you are feeling with and without your sunglasses. You may notice subtle but detectable changes. This will be more pronounced during the shorter days of the year.

It is important to condition yourself to take your sunglasses off whenever it's practical. It may be a little difficult at first, as your eyes may need time to reacclimatize to natural light, but most will desensitize rather quickly. Wearing a hat with a brim will help since, as mentioned, *direct* sunlight is not required.

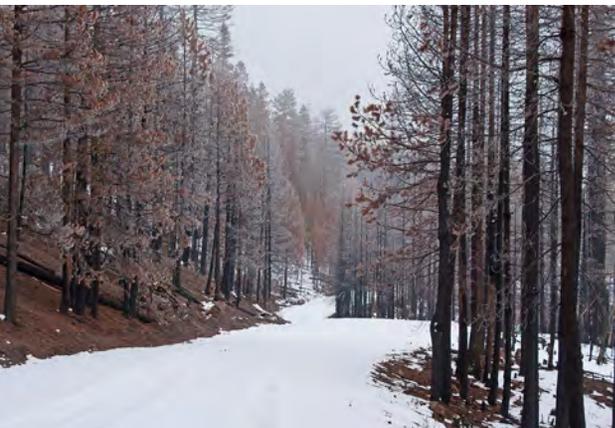
Of course, there are times when sunglasses are quite important. You will want to continue to wear your sunglasses in very bright settings and when driving.

If you are in a work environment with minimal exposure to direct light, take your breaks outside, even if it's just for 10 minutes. When you are outside during lunch or on weekends, especially when in a natural setting, allow your eyes to receive that natural blue-sky light.

When working in an office (or even at home), it helps to be near a window. However, often the glass is blocking the important part of the blue spectrum, since many modern glass windows contain tints that suppress helpful blue light.

## Winter "Light Loading"

In the winter, when natural light is at a premium, it's possible to "light load." This means getting as much natural or blue-spectrum light as possible at every opportunity. Take a morning break and go outside. During lunch, walk around outside, even if the light level is low. On weekends, make it a habit to go out, especially in the morning, and get exposure to natural light. And remember, keep your sunglasses off as much as possible!



Even when it's overcast and cloudy, a limited amount of light in the action spectrum is still reaching your eyes. Supplemental light supplied by MindSpa, especially in the early morning, will be very beneficial. Just set your white/blue led glasses to blue light and use your MindSpa system in bed, with eyes closed, before you get up. Or, if using our glasses, use in open-eye mode while going about your morning routine. Keep them as bright as comfortable.

When you understand why light is so important and how to make the best use of it, you will be able to function at a higher level both emotionally and physically. Just remember that light is a necessary part of a balanced lifestyle. Get outside, get exercise and fresh air, and feel better!

## Circadian Rhythms: Our Body Clock

MindSpa can help with two of the major causes of sleep disruption: high stress levels and lack of adequate light. When used as suggested, we guarantee you will experience a marked improvement in your quality of sleep.

### Stress and Anxiety

Many sleep issues are stress-related. We tend to enter into what are known as *mental loops*. This is where, especially in the quiet of the night, we maintain an inner dialogue, going over and over problems generally related to money, work, health or relationships. We are all familiar with this. It leaves us anxious and agitated, making quality sleep difficult to attain.

Normal beta activity is associated with regular, active thinking processes while awake. Mental loops will cause our mind to remain in the high beta activity state. During the night we go through a series of 90-minute sleep cycles. It is during the lighter sleep phases of these cycles that beta activity can spike, causing us to wake up. So instead of dreaming, our anxiety knocks us right out of the sleep cycle.



Stress can cause the mind to move into a combination of fast, high-intensity beta brainwaves. In this state, we are not so much solving problems as just obsessing about them.

MindSpa's relaxation sessions help to disrupt these mental loops by generating natural alpha state relaxation rhythms. With regular use, the mind will naturally attune to these alpha waves, quieting and slowing down our internal dialogue. When we are relaxed, we can fall asleep and stay asleep more easily. The quality of your sleep will improve.

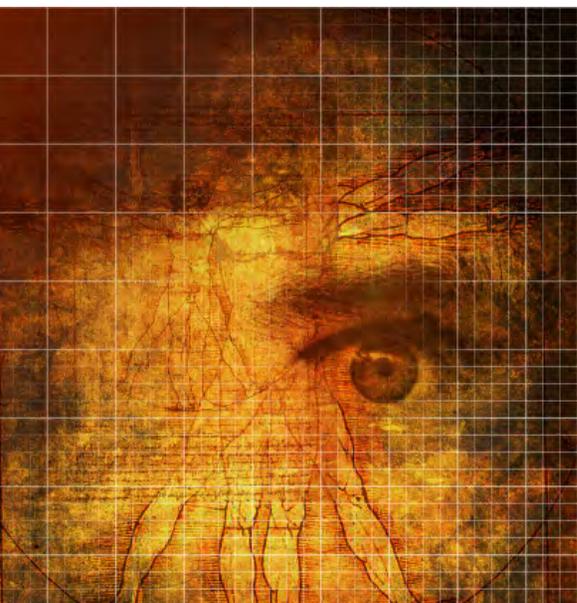
## Light-Related Sleep Issues

Imbalances in circadian rhythms are another major cause of sleep disruption. As stated earlier, we are light-regulated beings. A lack of proper daily light will disrupt our internal body clock. MindSpa can assist by providing the correct doses of blue light for resetting rhythms when natural light is not available in sufficient quantities.

Stress and a lack of beneficial light are among the root causes of a virtual epidemic of sleep disorders throughout the developed world. Quoting from *Forbes*; "According to the National Institutes of Health, sleeplessness creates \$16 billion in annual health care expenses and \$50 billion in lost productivity."

Scientists are finding that chronically reduced or disrupted sleep may lead to shortened life and increase the risk of obesity, diabetes and cardiovascular disease. "We know from all the research that sleep is just as important to overall health as exercise and diet," says Carl Hunt, special assistant to the director of the U.S. Heart, Lung & Blood Institute at the NIH.

The SCN, or suprachiasmatic nucleus, acts as the central processing system for our biological clock. It is located in the hypothalamus, a part of the brain just above the point where the optic nerves cross. Light reaches photoreceptors in the retina at the back of the eye. This generates signals that travel along the optic nerve to several areas of the brain, including the SCN, which is a non-visual part of the brain.



In addition to sleep/wake cycle regulation, the SCN also plays a primary role in hormone secretion, body temperature, and blood pressure regulation, among other daily functions.

In the presence of light, or the lack of it, signals from the SCN travel to various parts of the brain, including the pineal gland. Among the pineal gland's responsibilities is the production of the hormone melatonin—the sleep hormone.

Melatonin levels normally increase in the absence of light. Exposure to specific light frequencies suppresses melatonin production for several hours. Melatonin makes us feel drowsy (which is why less light later at night helps us to become ready for sleep, as melatonin is released) and plays a role in mood. Melatonin is also believed to play many other roles in regulating the body's functions. We suggest further independent reading on melatonin.

## The Retina and our Body Clock

The retina contains three types of specialized photoreceptors that respond to the visible light spectrum. Visible light ranges from approximately 370 nanometers (nm) to 730 nm, indigo to red. These photoreceptors consist of rods, cones, and the recently discovered light/dark receptors also referred to as the melanopsin photoreceptor cells.

The rods are the most numerous photoreceptors, and the most sensitive to light, but they are not sensitive to color. The retina contains approximately 110 million to 125 million rods. They are primarily responsible for dim light vision. The rods peak in the blue range and have almost no response to red light.

The cones are responsible for high-resolution vision known as the photopic photoreceptor system. The cones are color-sensitive and divided primarily into red and green cones, with a small percentage of blue cones. There are approximately 6.5 million cones in the retina, divided into approximately 64 percent red sensitive cones, 32 percent green cones, and 2 percent blue cones. The blue cones are more sensitive to light than the red or green cones.



## The Melatonin Action Spectrum

What does all that have to do with you and your health and sleep? In 1998, scientists discovered a specialized set of cells in the retina that respond specifically to short-wavelength blue light in the 446-483 nanometer (nm) range. This also happens to be the wavelength of the clear blue sky. Called the *action spectrum*, this blue-light wavelength band plays a major role in aligning and resetting the body clock through the release of melatonin.

The melanopsin receptors are independent of the classic rod and cone photoreceptors used for vision, and are not part of the visual system. They are active even with eyes closed and while asleep. It is theorized that blue-sky exposure is how these ganglion cell photoreceptors evolved their specialized purpose.

These photoreceptors regulate circadian rhythms primarily via melatonin secretion. When exposed to this specific band, melatonin production is suppressed for several hours.

MindSpa's blue leds glasses are tuned within a few nanometers of short-wavelength blue light in the 446-483 nm range, making them very effective for resetting the body clock.



## Circadian Rhythm Disorders

Circadian rhythm disorders are typically related to sudden and/or extreme changes in the relationship between exposure to environmental light and activity. This can include changes in geographical location (jet lag), aging, and night activity (night-shift workers).

Another common type of circadian rhythm disorder is seasonal affective disorder (SAD), which is characterized by symptoms such as lethargy and depression during the winter seasons when the duration of daylight is reduced. Due to decreased light exposure, melatonin production continues during the waking hours. This can affect the mood of many people in locales where winter light reduction is especially pronounced.

Symptoms much like jet lag are common in people who work nights or who perform shift work. Because shift work schedules are at odds with powerful sleep-regulating cues like sunlight, they often become uncontrollably drowsy during work, and they may suffer insomnia or other problems when they try to sleep.

Shift workers have an increased risk of heart problems, digestive disturbances, and emotional and mental problems, all of which may be related to their sleeping problems. The number and severity of workplace accidents also tend to increase during the night shift. Recent evidence suggests it may be possible to reduce shift-related fatigue by exposure to specific frequencies of blue light in the workplace, minimizing shift changes, and taking scheduled naps.

Sunlight also causes other changes in the body, such as increases in the production of the neurotransmitter serotonin. Serotonin production increases when a person is exposed to sunlight. Low levels of serotonin are associated with depression and mood swings.

Along with using MindSpa, as we emphasize throughout this guide, it is important to get as much proper spectrum light as possible every day for health, balance and general well-being. This becomes even more necessary in the winter when light levels are low.

## Using our Blue Light Glasses with MindSpa Sessions

For general well-being and balance, use one of the relaxation sessions each morning shortly after waking up, for a minimum of a one-half hour (45 to 60 minutes is preferable). Time of year and location play an important role. If you are receiving low exposure to natural light, use more often to maintain circadian rhythms.

If your sleep-related issues include going to sleep too early and waking up too early, this is known as an *advanced phase response*. For this issue, use the blue LED glasses in late afternoon or early evening. This blue light tuned to the action spectrum can phase-advance your internal clock. This will help you to readjust your sleep patterns so that you're ready for bed at a more normal hour.



If you are falling asleep too late and/or waking up late, this sleep disruption is known as *delayed sleep phase response*. For this situation, use the blue light sessions daily in the early morning, and try to get plenty of unfiltered morning sunlight (avoid sunglasses or tinted windows, such as those found in autos and commercial buildings). You can actually use the blue light therapy early in the morning and go back to sleep, as the melatonin photoreceptors are active even in sleep.

While some customers report excellent results at night, we suggest for use close to bedtime our green and amber sessions. Blue and white light may be too stimulating and may result in trouble falling asleep or sleep disruption during the night. For the majority of people, it's best to use your MindSpa stimulation sessions daily for minimum 22-30 minutes, generally, at least two to three hours before retiring to bed.

Long-term changes to sleep rhythms will require use of your MindSpa blue lights every day for a minimum of 45 minutes to one hour in the early morning. It can take a minimum of one month and up to three or four months of regular daily dosages of blue light to experience long-term sleep improvements. We always recommend consulting a medical professional before beginning use of this product for sleep problems.

For common circadian-related disorders, such as seasonal affective disorder, use early in the morning or upon awakening for a minimum of 45-60 minutes every day during the winter months. As mentioned, the melatonin photoreceptors are active while asleep, so you could put on the glasses after five in the morning, go back to sleep, and still receive full benefit.

*Note:* During mid-day, our sensitivity to blue light is essentially shut off. Blue light sessions have little to no effect during most daylight hours starting from mid-morning to late afternoon. At these times, we suggest using our white leds, or optional red/blue leds with your MindSpa system for maximum effect.



# Light and its Relationship to Travel

In the preceding pages, we've covered a great deal about the importance of light for virtually every bodily function and its role in maintaining health, well-being, and performance. Traveling from one time zone to another can rob the traveler of this essential nutrient to the eyes and skin.

Jet lag is the result of a rapid shift in time zones. It's characterized by a variety of symptoms, including sleepiness and fatigue, agitation, ability to concentrate, lowered alertness and memory, feelings of lethargy, light-headedness, weakness and general clumsiness. These symptoms often limit our ability to perform at full potential. Severe jet lag (from changing six or more time zones) can make driving a motor vehicle as risky as driving under the influence of alcohol.

Perfect for traveling through several time zones, MindSpa can be a remarkably helpful tool for helping to alleviate jet lag symptoms and the associated weariness and fatigue resulting from long flights. When you use MindSpa sessions at key times, along with your blue light sessions, you can feel relaxed, refreshed and reinvigorated.

MindSpa can be used in two ways for jet lag. One key is to use our blue light sessions, which are tuned to the *action spectrum* that affects circadian rhythms (our internal body clock). Instructions are provided below.

The second key is to use MindSpa's relaxation programs during travel and at your destination to help energize and revitalize. You can overcome the effects of jet lag more quickly and easily when you use MindSpa technology and follow these simple rules.



## Using MindSpa to Reduce Jet Lag Effects

Use MindSpa during travel and after arrival to help you overcome the effects of jet lag. Use any of the longer relaxation sessions on the plane. Then use one of the energizing sessions at your destination for recovery and mental sharpness.

When using mid-day, falling into a short nap is fine. However, be careful not to allow yourself to fall into a deep, prolonged sleep. Sleeping too soundly during the day after arrival can make it difficult to go to sleep at your typical bedtime in your new destination, which can prolong your jet lag symptoms by several days.

At your destination, we recommend using MindSpa either seated comfortably in a chair, or on your bed in a reclining position with an alarm set to wake you in case you fall too deeply asleep.

After your session, especially the day of arrival, you may feel a bit groggy. That is expected, but it should pass quickly. Stay active; go outside for a walk and get some light to moderate exercise. By staying active until bedtime, you will sleep much better and adjust more quickly.

Avoid caffeine during the late afternoon and especially in the evening. Assuming you are going through a major timezone shift, if you usually drink coffee or tea in the morning at home, your body is going to crave it at your new destination at the very time you should avoid it. This can be a good time to do a quick MindSpa session.

Follow these few simple rules and you can reduce the effects of jet lag and amount of time it takes to adjust to your new time zone.



## Using our Blue Light Therapy Prior to Travel

For eastbound travel, three days before departure go to bed one hour earlier than usual and get up one hour earlier than usual. Next, early in the morning, get as much natural light as possible. If this is not possible due to schedules or other circumstances, use MindSpa with our blue led glasses for at least one hour immediately upon awakening.

If you are the owner of one of our products, our glasses can be worn with eyes open, so you can go about your normal morning routine with minimal disruption. When needed, you can take them off and continue treatment later. Keep the lights in the glasses as bright as possible, provided the brightness is comfortable. Choose any of the relaxation sessions, and restart another session after you complete the first, to receive a minimum hour of light.

For westbound travel, you can maintain your normal sleep schedule. Use a blue light session for at least one hour and optimally for two to three hours before bed during the three days before travel. Optionally, if the sun sets late due to the time of year, get as much exposure to natural light as possible during the day, then use MindSpa to supplement natural light. By using this protocol prior to departure, you will be able adjust to your new time zone more easily.

## Additional pre-travel tips

Stress can have a negative effect on your body during long trips. The days before a long trip can be a very stressful time for many people. This is where self-regulation ability really comes into play.

The best way to start is with plenty of rest. Plan ahead as much as possible, so the day before your trip you are prepared and have reduced stressful events and responsibilities to a minimum.

Use your MindSpa as noted above and heed these additional suggestions:

### **Reset your watch**

When moving through multiple time zones, from the moment you board your flight, immediately place your thinking in your new time zone. Start by immediately resetting your watch to your new destination time.

Even better, begin several days in advance and be consciously aware of your destination time zone. Take note of the three major mealtimes and the times you will be rising and sleeping. During various times in the day, visualize yourself at the destination and what you would be doing at that time. Take it from seasoned travelers—mental preparation really does make a difference!

### **Get plenty of fluids**

Drink plenty of water and nonalcoholic beverages during the flight. Eight to 16 ounces per hour is generally recommended. The air is very dry inside an airplane cabin, making dehydration likely. Dehydration leads to fatigue and unnecessarily prolongs jet lag recovery.

### **Avoid alcohol on long flights**

Alcohol will accelerate dehydration and play havoc with the resetting of your internal body clock. It is best to avoid alcohol when traveling on long flights. If you drink alcohol, drink in moderation and take note of the destination time. For example, do not drink when it is destination morning time. It will make adjusting to your new time zone all the more difficult.

### **Get sunlight**

The single most powerful aid to resetting your internal body clock is natural sunlight. Frequently, when you depart on a long overseas trip covering six time zones or more, it is nighttime at your destination. You should keep the blinds down or wear an eye mask and try resting, even if you're not sleepy. Just winding down will help. If you arrive during the day, get as much sunlight as possible. Avoid sunglasses. If you go straight into meetings, situate yourself facing the window.



Traveling through multiple time zones over an extended period of hours can rob the traveler of light. Just as a reduction in proper level of fluids or nutrition can cause fatigue, lack of sufficient light can be just as debilitating. If you want to operate at maximum level mentally and physically, it becomes necessary for you to be exposed to adequate light stimuli.

### **Movement and stretching**

It is very important to move about the airplane cabin on a regular basis, whenever it is safe and allowed. Sitting still for long periods of time in flight causes discomfort and can lead to swelling of the legs and feet. In some cases it can lead to serious health problems. Get up about once every hour or so, especially during the daylight destination hours, and do some simple stretching exercises. You can also do a series of stretches while sitting to keep your blood flowing and prevent pooling toward your lower extremities.

### **Sleep and rest**

Inevitably you will feel drowsy during a long flight. If you are the kind of person who can sleep on a plane, by all means go ahead and get some rest. If sleep is difficult for you, try using any of the longer deep relaxation programs which can be very effective in helping you to relax into sleep. You will want the volume to be at levels higher than normal because the airplane noise will tend to drown it out. If desired, use a calm relaxing music in combination with the internal MindSpa sounds.

It is best to try to sleep when it is nighttime at your destination (even if you're still in flight). Reduce your mental and physical activities at these times, even if you don't feel drowsy or ready to sleep yet. It will pay dividends.



## Caffeine

When it's morning at your destination, even if you're still in flight, try to soak up some daylight if it's light outside—perhaps at the back of the plane so as not to disturb others who may be sleeping. This is the only time during your flight that you should drink caffeine, as it can be helpful when used to stimulate you at what will soon become your morning time.

Any of us who have traveled long distances know that the day of arrival can be tough on your mind and body. If possible, keep your schedule open or flexible. Once you arrive at your destination, think of sunlight as a much-needed nutrient for your body, and absorb as much natural daylight as possible. Do not take extended naps during the day of arrival. Go outside and stay active. Eat at regular mealtimes once you arrive at your destination.

Avoid any stimulants, such as caffeinated beverages or foods (this includes chocolate, caffeinated tea, coffee or colas) during this first day, and do not drink caffeinated beverages until the morning following your arrival. Caffeine can cause your body clock to remain on your home time when used improperly. If you are a regular coffee or tea drinker, your body will really crave it that first day of arrival, especially when it is morning at your home time. For the first few days, avoid caffeine after approximately 3:00 p.m. until you feel normal. Ideally, even after the first few days, it is best to continue to avoid it in the late afternoons.



# Chapter XI

## Meditation and Consciousness

If raising your consciousness is your primary interest, and that pursuit is your intention (or one of them) for using MindSpa, here you will find a basic background and pragmatic approach.

### Truth is found in the stillness of one's mind

Modern conveniences and lifestyles tend to fill our time, providing less opportunity to ponder our individual and collective position relative to the planet and the universe. Meditative practices, whether using light and sound or through other methods, open the doorway to the deeper self.

Our one general assumption is that there is a greater consciousness to which we are all connected and of which we are all a part—and that we are each placed here to raise our consciousness during our time on Earth. By doing so, we each help to raise the consciousness of humanity as a whole.

The deeper we go looking for the essence of matter, the more obvious it becomes that we are pure energy. The faster our individual vibrational energy, the more it affects the whole organism. Every action contains inherent vibrational energy. Every thought is vibrational energy sharing an interconnection to every other vibration, like multiple ripples on a lake. There are infinite vibrational levels we can attain.

We are all part of and connected to the universe in what is termed nonduality. There exists no true separation, as all things are connected. The way to know this is to experience it firsthand, and that can be accomplished through ongoing meditative practices.



Many throughout history have expressed this universal experience of nonduality in innumerable ways. The common core of an experience of awakening to this reality—crossing this threshold—is the experiential knowing that all things are connected.

The mind is a deep well. Going toward your center is not exactly a straight path. There are many layers. Imagine slowly descending toward the darkest bottom of the deepest ocean. Conditions change as you descend.

With a willingness to explore—to be on the path of self-discovery—there is tremendous potential for awakening, deepening on our path, and attaining higher consciousness. There are many good teachers and there is a tremendous amount of literature available for those who seek higher purpose and meaning. Seek independently and wisely for authentic spiritual practices that resonate with you and further you on your path.

Below we will cover a few practices and capacities that offer doorways into higher consciousness, and that specifically benefit from and can be cultivated by use of technology such as MindSpa.

## Lucid Dreams: Knowing You Are Dreaming

Being able to consciously influence your dreams and direct their storylines: many people would love to master this skill. And why not? It sounds like a lot of fun—flying, traveling to other worlds or places, meeting famous or long-dead people...not to mention dream sex!

However, while it can be fun, lucid dreaming is not just meant to be like an amusement park ride. It can actually be a doorway to real personal growth as well as adventure.

In the 1970s, Keith Hearne, Ph.D., was the first serious academic to study the lucid dream process. He discovered that the lucid state occurs during the REM portion of sleep, and that



the lucid state operates in real time. He also recognized that through a series of exercises, the state could be induced. Hearne published several books on dreams and dreaming, including *The Dream Machine*, which is available for free download: <http://www.keithhearne.com/books/>

Following in Hearne's footsteps, Stanford University's Stephen LaBerge, Ph.D, also took up the study of the nature of the lucid state and worked to refine dream induction techniques. He subsequently built on Hearne's groundbreaking work, creating a series of exercises to support the lucid dreaming process and publishing the paperback *Exploring the World of Lucid Dreaming*.

In the early 1990s, LaBerge opened the Lucidity Institute and began producing a modified sleep mask with built-in timer-based blinking lights to help induce lucid dreams. His next upgrade actually tracked REM (rapid eye movement) which occurs during the dream phase of sleep. This would trigger flashing lights.

The idea was that through a series of mind-based exercises, such as asking throughout the day "Am I awake or am I dreaming?" we could train ourselves to recognize the dream state. The lights ideally would trigger this awakened lucid state while dreaming, yet not be so invasive as to cause one to wake up.

We began working with Dr. LaBerge and the Lucidity Institute in 1992. We assisted in the technical development of a version of his *Nova Dreamer* mask released in 1994. From his work and our decades of direct experience and research in neuroscience, we will explain how you can evoke the lucid dream experience.

Today there are several popular copycat devices claiming to help move people into the lucid dream state. But a strong and consistent lucid state experience, which can be used for personal growth, is very difficult to attain simply by wearing a mask with lights that blink. Dream detection and signaling devices alone are simply not enough to get you to lucid dreaming reliably. People who use these alone, without meditative practice, often end up frustrated with little to show for their efforts except disturbed sleep patterns.

But if you already own such a device, you can make these dream signaling devices far more effective—and become proficient at cultivating this state—by using meditative practices along with MindSpa.

The lucid dream state is a lot like trying to balance on a narrow beam. There is no shortcut to learning this skill. Despite the challenge of maintaining a state between sleep and wakefulness, with commitment and practice it does become easier to balance between these states.

Typically, if you are unconscious and not responding to your dreams, you will sleep normally. On the other hand, if you do happen to realize you're dreaming, without proper training you will either wake yourself from the excitement, or will not be able to hold the state for more than a few short moments. Has this been your experience?

## How to Train for Lucid Dreaming

The key to mastering this state is a matter of understanding the basic mechanics common to all the ancient lucid dream practices. Drawing from ancient texts, we realize that for millennia it's been understood that the doorway leading to reaching and maintaining a lucid dream state is through the practice of entering and maintaining a calm, meditative mind state.

## Commonality within the Ancient Practices

It's no coincidence that ancient texts from a variety of religious and spiritual practices—Buddhist, Hindu, and Jewish—describe in similar terms the nature of the lucid state and how it's attained and utilized.

Among the most ancient and well-developed dream practices are Tibetan Buddhist, Hindu, Taoist, ancient Greek, Sufi, Islamic, Judaic and Tantric practices. Each utilizes forms of meditative techniques to reach a state of lucid consciousness. These ancient cultures practiced the awakening of consciousness within the dream state as part of a higher spiritual journey toward self-realization.



In the Tibetan Buddhist practice Dream Yoga, yoga is essentially the practice of eventually attaining “oneness” or self-realization. In the ancient classical Yoga Sutras, going back 2,000 years, yoga practice is considered “...the control of thought-waves in the mind.” Mastery of the thinking mind is reached through the ongoing practice of nonattachment—quieting the mind through meditation to reach a state of heightened clarity.

Buddha’s definition of yoga similarly says; “To enjoy good health, to bring true happiness to one’s family, to bring peace to all, one must first discipline and control one’s own mind. If a man can control his mind he can find the way to enlightenment, and all wisdom and virtue will naturally come to him.”

The Taoists (The Way), with practices going back over 3,500 years, consider falling into the sleep state a process not unlike entering into a meditative state. For the Taoists, falling asleep is an exercise of consciousness without the limitations of the physical body. In essence, the practice focuses on the opening of Qi (Chi) energetic pathways throughout the physical body.

A similar sensibility is reflected in Hinduism as well. In traditional Indian medicine, chakras are represented by seven energy centers within the body. Through meditative techniques, including deep breathing, yogis focus on two of these seven chakras to induce the lucid dream state.

## **Meditation and Lucid Dreaming Are Inseparable Partners**

Many people have tried meditation but report limited success. Until we try to consciously quiet the mind, we do not realize how difficult it is to do something seemingly so simplistic and basic.

Our minds are always busy and tend to race with thought. When we go to sleep, we fall into a slumber that is still dealing with the physical and mental aspects of daily life, including our emotional state. These emotional dreams overtake our sleeping thought processes, making it exceedingly difficult to awaken within the dream.



The doorway to the lucid dream state is through being able to quiet your mind. This technically means slowing down your dominant beta brainwave activity toward the alpha and theta brainwave states. With cumulative practice at this, a critical balance or synchrony is created within the brain. This creates greater neuroplasticity, resulting in new neural connections in the brain.

Neuroplasticity refers to the fact—around which there is a growing field of exciting study—that the brain is flexible and can change and grow with input. Neuroplasticity is the ability of the brain to restructure itself after receiving input or training based on repeated practice. For a long time, it was believed that only younger brains were able to change. But we now know that our brains are flexible throughout our lives, and pathways can be changed, grown and influenced.

The best way to practice cultivating awareness that leads to lucid dreaming is while in a deeply relaxed yet lucid state between sleeping and waking. Consistent practice when the mind is calm and quiet will open a passageway into awareness from which you can begin to experience and take control of the lucid state.



## Brainwave Entrainment: Tools for the Lucid Adventurer

MindSpa is in essence a natural evolutionary tool utilizing modern technology to provide ancient methods for quieting the mind. Following the advice in this guide, your practice sessions with your MindSpa will help shift your dominant brainwave frequencies toward the slower, deeper (and therefore transformative) states. This facilitates the “opening” of oneself—one’s spiritual channels—that is discussed so often in ancient spiritual texts.

You will find that with time, your mind is more at ease and more aware regarding every aspect of your life—and not just when you are using our technology. The longer you use MindSpa, the more proficient you will become at entering these states.



In preparation for the lucid dream experience, and to fully appreciate the lucid dream state, do your own research on the practice and history of lucid dreaming. This knowledge will help you understand its essence and the potential richness of this experience.

## Mysticism and the Third Eye

Another area of ongoing interest in ancient legends and practices is the concept that every living organism consists of a life force light/energy field. This boils down to the belief that we really are all comprised of energy. This belief informs a wide range of disciplines and concepts: Chi, auras, chakras, Kundalini, and to a certain extent acupuncture.

Often when investigating the mystical, we turn to the East for examples. However, the idea that we are illuminated beings is illustrated throughout traditional Christian and European art as well. There are countless depictions of halos—golden light—around religious figures. This has always been part of mysticism and ancient lore.

The idea of opening the “third eye” is among the most ancient of practices. We recommend reading classic literature on the subject. (Careful: the internet and bookstores are full of sensationalism and “revealing of secrets” or so-called shortcuts. Be discerning about your sources.)

### Exercise

Here is a simple but fun exercise that can lead to results with practice. If you are new to MindSpa or meditation, or have not practiced a meditative technique on a regular basis for a period of time, we suggest getting into a regular routine for at least four to six weeks before moving to the following or similar exercises.

The goal is for you to actually experience the presence of your third eye. This can be accomplished with light and sound, or just by doing a quiet meditation. Either way, first allow at least 10 minutes from the start of your session to reach a relatively still state. This is a very high-frequency, low-intensity energy force.

Once you feel calm and relaxed and are sensing your mind slowing down, focus on the area between and just above your eyebrows at the lower-middle of your forehead. Imagine that there is an energetic eye between your skull and your skin surface, like a dormant muscle waiting to be awakened. This is your point of focus.

Now in your mind's eye, imagine seeing a living being—a person, plant or creature. While maintaining your relaxed or meditative state, see the shimmer of the glimmering life force surrounding living beings. (You can substitute visioning a golden ball of energy if you prefer.)

Feel and sense the vibrational energy of the object. At first there may be nothing, or it can be very subtle, but with time it will become brighter and more pronounced as you grow with the practice.

Opening the third eye can awaken one to deeper empathy toward others, and lead to a deeper relationship with one's true spiritual nature.

## Practicing in Natural Surroundings

This “third eye” practice is especially fruitful in natural environments. Being out in open spaces away from people or by the ocean can be an excellent place for practice. Being out in nature where it is contemplative to begin with makes it easier to get into a relaxed state.

The blue background of the sky also helps in training one to see auras around living creatures, such as birds of prey. So when you are looking at the blue sky, if relatively slow-moving birds of prey are present, look for a subtle shimmering around the animal. With time and practice, this can help build a sensitivity toward seeing auras around living objects.

After doing a MindSpa session or meditating outdoors, you can try this practice by meditating with eyes open, or practice with them closed and then opening them after a few minutes.



As you begin the exercise, take several slow, deep breaths. Work slowly. If you see a bird, first look past it rather than focusing directly on it.

Focusing from the middle of your forehead, imagine seeing a halo or glow around the animal. When it begins to happen, at first you may convince yourself you are imagining it, or that it is an optical illusion. Keep at it and after a while you might actually begin to feel your third eye emerge.

The third eye meditation is best practiced alone or with a partner, but when people and modern disturbances are absent. These are subtle energies that are easily disturbed in the presence of others.



## Higher Intelligence and Survival

We all have moments of clairvoyance, foresight, déjà vu experiences and some almost impossible coincidences that defy normal explanation. How we process these types of experiences are up to each of us. There are theories suggesting that at one time, these skills might have been much stronger, and have through the ages become a lost art.

Before we had effective weapons to fend off predators, we had developing intelligence. The reason the human race may have survived where so many species did not might well have been due to our ability to use intuition, our sixth sense—a superior intelligence.

Once societies began to take shape, this ability may have been repressed. But there is ample art and literature going back through the ages to suggest this phenomenon has always existed.

Meditative practice, whether using MindSpa or any one of the many forms of meditation to reach deeper states, can assist us in reopening these ancient skills.

## A Final Word Regarding Exercises in This Manual

There are many excellent resources that can help you more fully develop your capacities and potential in concert with your MindSpa. Developing further knowledge and skill with regard to nutrition, sleep, meditation, guided imagery, relaxation techniques, anchoring, and other topics we touched on will enhance your MindSpa's impact on health, balance, well-being and spiritual attainment.

Also refer to our regularly updated Health and Wellness Blog for the latest scientific research in many areas related to the topics covered in these pages. We publish nine major topics including infant, children, teen and women's health and wellness, meditation and yoga research, circadian clock, PTSD & TBI, memory, aging, exercise and diet research. [www.avstim.com](http://www.avstim.com)