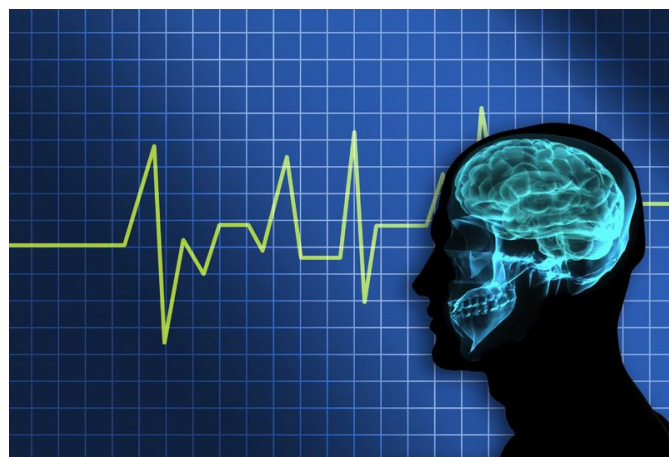


# The Meditation Center

## Brainwave Entrainment



## Important Note

People with the following conditions, should consult their doctor before listening to the Brainwave Entrainment sounds.

Do not use the CD:

- When driving or operating heavy machinery
- If you suffer from any type of epileptic seizures
- If you suffer from psychological or psychiatric disorders
- If you have a pacemaker
- If you have high blood pressure
- If you are under 18 years old

The Meditation Center is not liable for any damage done to you or anyone else as the result of listening to Brainwave Entrainment

To use this session, sit in a quiet place, free of distraction. Make sure you are comfortable, with your back straight in a comfortable chair or sitting in your normal mediation position

Headphones are not required for this session.

It is important that you adjust all settings (such as volume) until you are 100% comfortable with the session before starting.

You may want to drink a glass of water before each session. Entrainment increases blood flow and metabolism, which can make you thirsty mid-session

After starting the session, try to relax Fidgeting constantly could act to bring you out of the target brainwave pattern.

To obtain full benefit you should listen to the track once a day at the same time for a few weeks

## The Benefits of Using Brain Wave Entrainment

Brainwave Entrainment can be used to

- Reduce stress Alleviate pain
- Achieve deep relaxation Increase self confidence
- Enhance creativity Eliminate unwanted habits
- Improve motivation Accelerated learning
- Quit smoking Increase energy
- Lose weight Improve sleep
- Overcome depression and anxiety
- Practice meditation
- Use as a back ground meditation to keep you in a light meditative state

## What is Brainwave Entrainment?

Our brain wave patterns are directly related to our states of consciousness from the beta of our normal waking consciousness to the delta of deep sleep.

Studies show that sound waves can induce these brain wave patterns which in turn can change your state of mind. Imagine being able to attain the same meditational state as a Zen Buddhist without the years of training, just by simply listening to a mp3 of recorded sounds. Learning to change your brainwaves through meditation can take years of practice.

Scientific research has demonstrated that brainwave entrainment can train your brain activity to specific brainwave ranges for desired benefits (Bliss, C. A., Burns, W. J., & Montgomery, D. D., 1995; Rosenfeld, J.P., Reinhart, A. M., & Srivastava, S., 1997; Wise, A., 2004).

This in a few short words is the science of brain wave entrainment. It changes your brainwaves for you without any effort on your part. Up until now, this science has relied on binaural beats. These beats are created by listening to two separate tones in each ear. The interaction of these tones creates a beat in your mind. By tuning the frequency of this beat, you can change your state of mind.

The beats in 'isochronic' and 'binaural' methods are essentially the same, except for the following:

1. With isochronic beats, the brain doesn't have to exert extra effort of interpreting the difference between 2 tones as with binaural tones.
2. While binaural tones require stereo, isochronic doesn't.
3. While binaural tones require the use of headphones/earphones, isochronic doesn't, although headphones are still recommended.

These sessions are produced using isochronic tones which are more powerful than binaural beats and do not require the use of headphones.

This 30 minute meditation track is designed to induce and keep you at the Alpha brainwave level so that you remain in a light meditation state. You should not progress to the deeper Theta levels of meditation until your brain has adapted fully to the Alpha state. Usually about 3-4 weeks depending on how often you listen to the meditation. If you

If you like these alpha meditations and want to try out deeper levels of brainwave entrainment please visit <http://www.the-meditation-center.com> where you can purchase more meditation CDs. Sometimes the brainwave entrainment can cause a release of any emotional trauma in your past and you may find that you get emotional while listening to the CD at first. Just accept whatever happens as you listen and do not try to analyse your response. If you feel very emotional then you should stop using the CD until you feel better.

The Meditation Center is a new social site for people who wish to meet and discuss spiritual issues with others. It is free to join and there will be more free meditations as a gift when you join. As the meditation Center has only just begun there are reward points for all activities within the site for those who help me to set it up and get others to join. You can exchange your reward points for more meditation downloads in the e-shop.

## Benefits of Brainwaves Entrainment (BWE) and Meditation

Research by Siegel 1990 & Mate 2003 have shown that stress causes the brain to release hormones which become harmful overtime if stress levels remain high and do not return to normal. When stressed our brainwaves remain in high Beta levels. Brainwave entrainment slows the brainwaves allowing the body to relax and break the cycle of high stress beta levels. Research in neuroplasticity shows that our brain has the ability to change and learn new pathways, resulting in improvements in moods, behaviours and health. However there is much more to brainwave entrainment than simply reducing stress

As you lower your brainwave activity the more you increase the beneficial neurotransmitters and endorphins in the brain. For example, serotonin production increases when you are in alpha, theta and delta activity. Research has repeatedly shown that serotonin is linked to both mental and physical health.

There are many research studies that support alpha/theta brainwave training with alcoholism. Eugene Penniston and Paul Kulkosky have been demonstrating positive results since 1989 with alpha/theta entraining. In their research studies with alcohol addictions they found significant decreases in their depression, cravings for alcohol and relapses.

A recent study conducted by Dr. David Cantor, demonstrated that brainwave entrainment significantly improved patients depression and also produced neurophysiological changes in the mood-regulating centers of the brain (2007). Cantor is cautious to say that not all types of depression may benefit from brainwave entrainment and certain frequencies are needed for different types of depression.

Please note these meditations are not meant to replace any medical treatment for addiction or depression. They should be used as complimentary treatments to aid recovery and you should consult your medical practitioner before using them if you have any serious medical or psychological illness.

Below is a list of the benefits, as shown by scientific research, that using brainwave entrainment produces.

### GABA

Gamma aminobutyric acid is an important neurotransmitter needed for stabilizing moods, calming the body like an "off" switch. Individuals who regularly meditate usually have high levels of GABA. GABA is involved in the production of endorphins, "feel good-runners high" chemicals. Depleted levels lead to anxiety, tension, stress and insomnia.

### Serotonin

This neurotransmitter keeps all the other neurotransmitters in healthy balance. It also influences emotions and behaviours, concentration and focus. When serotonin is at a healthy level we sleep better, enjoy life and think rationally. Depleted levels often lead to depression, premenstrual syndrome, fibromyalgia, insomnia and migraine headaches.

## **Endorphins**

Individuals who meditate have significantly increased levels of endorphins. Most of us associate endorphins with exercising however, these neurotransmitter can be increased via other methods. Basically, it is our bodies' natural pain killer.

## **Acetylcholine**

Major role of acetylcholine is to enhance memory. It determines the speed at which our brain functions, consequently determining our brain age. When your acetylcholine levels are balanced you feel creative, learn information efficiently and have a good memory. When these levels are imbalanced your memory declines and language difficulties may occur.

## **Dopamine**

Dopamine is like an "on" switch, it controls your energy, excitement about ideas, and motivation. It plays a critical role in regulating the central nervous system such as attention, cognition, movement, pleasure and emotional processing. A deficit in dopamine is found in Attention Deficit Disorders, Parkinson's, severe fatigue, addictions and obesity.

## **Melatonin**

Melatonin is involved in our sleep cycle. Levels in the blood peak before bedtime which leads to a deep restful sleep. Stress has a major impact on decreasing our melatonin levels. Individuals who meditate have increased levels of melatonin.

## **Human Growth Hormone**

Human Growth hormone (HGH) is produced naturally by our brains when we are children and then gradually diminishes as we age. Sleep, exercise, relaxation and diet stimulate this hormone. It has been demonstrated that individuals with healthy sleep cycles and meditators have boosted levels of HGH.

## **DHEA**

Dehydroepiandrosterone has a variety of health benefits. It strengthens the immune system and has been proven to be beneficial in the prevention and treatment of cancer, lupus and cardiovascular disease. Stress and anxiety depletes DHEA while meditation increases DHEA levels.

<http://www.neuroacoustic.com/epsilon.html> © 1999 -- Dr. Jeffrey D. Thompson, D.C., B.F.A -  
- Center for Neuroacoustic Research

Please see the chart below for details about each brainwave level and the beneficial effects of each level.

Brainwave HZ	Effects	Useful for	Meditation level
Beta 14-40 Hz	Being alert and focused logical thinking High levels cause anxiety & stress Insomnia muddled thinking.  Prolonged high levels cause physical symptoms such as high blood pressure	ADD/ADHD, Chronic Fatigue syndrome (CFS), fibromyalgia, Seasonal Affective Disorder (SAD), peak performance  The Meditation Center does not make brainwave entrainment for these conditions.	Not associated with any form of meditation state.  We are in Beta most of the day in order to work and organize our lives
Alpha 8-14 Hz	Peaceful relaxed yet aware,  Enhances serotonin which increases -mood elevation  Enhances acetylcholine production within the brain which assists functioning of brain speed and memory	Anxiety, stress, addictions, self-reflection, mood elevation, brain aging, memory, strengthens immune system, enhances emotional and spiritual growth  Best level for learning and altering thinking patterns. level at which most hypnosis suggestions are made	Light meditative state  Alpha brain states are associated with a typical "Zen" meditation, in which the attention is in a state of "open focus." In this state, one's attention is directed to everything simultaneously.
Theta 3.5- 8 HZ	memory enhancement  original, creative inspiration, problem solving GABA Serotonin for mood enhancement Prevents release of harmful stress hormones associated with illness	insomnia control, reduce mental fatigue, menopause, anxiety stress	Theta brain states are associated with out of body or astral forms of mediation. In these states, one usually experiences seeing the guru, experiencing places of beauty or peace, and sometimes receiving great spiritual insights with associated visions and sounds. These Theta states are also associated with the classic Shamanic "journeying" experiences.
<b>Delta</b> 3.5 to 0.1 Hz	Deep Sleep Deep relaxation, Release of Anti-Aging hormones melatonin and DHEA Human Growth Hormone	Advanced healing of body and mind  Access to the unconscious mind  Boost the immune system  Deep spiritual experiences	Associated with being in the void or "white light" states. These states are timeless, formless and linked to states of suspended animation. Out of Body Experiences. Deep-level Yogic adepts can slow respiration and heart beat to be virtually undetectable.

We hope you enjoy using these Alpha meditations and welcome any feedback you may have. If you have any comments regarding your experiences while using these meditations please visit the [www.the-meditation-center.com](http://www.the-meditation-center.com) and leave your comments on the forum for meditation entrainment. If you need any help or guidance while using these meditations please leave a message at the forum or contact support via the Meditation Center. We are always here to help and look forward to you becoming an active member of the Meditation Center.