



# What is brainwave entrainment?

Essentially 'entrainment' is a process of synchronising two different beats so that they become harmonious. Brainwave entrainment is an assisted form of meditation using sound or light pulses or both.

Your body contains an autonomic entrainment mechanism that synchs you up with strong, external rhythms, pulses or beats. We naturally entrain to the rhythms around us, although we are not aware of it most of the time.

Brain entrainment can be brought about by means of sounds that entrain brainwaves into certain natural and beneficial frequencies.

Think of it like a piano that needs re-tuning in order to play the notes at the right pitch. The process works by 'entraining' the brain to work better and become more in tune with its optimal mode of functioning.

## Why do we need brainwave entrainment?

I am sure that I don't need to explain how we all suffer with stress in one form or another. The effect of stress creates a hormone in our body called Cortisol.

Increased levels of Cortisol are very damaging to the brain and body.

High levels are linked to numerous health problems such as; depression, reduced bone-density, thyroid problems, reduced cognitive performance, reduced muscle tissue, lowered immunity, blood-sugar imbalances, inflammation in the body, increased abdominal fat, and cholesterol imbalances.

The 'cure' for stress and reduced Cortisol is meditation. However the benefits of meditation come with regular practice can take years to perfect.

## How does brain entrainment help?

In traditional meditation practice, you are taught to focus on something to help still your mind and discipline yourself to remain focussed.

With brainwave entrainment audios and technology you don't need to maintain focus in order to reap the benefits because technology creates the same brain waves in mere minutes that traditional meditation may take years for you to achieve.

It is therefore a short cut to extraordinary results and also a form of meditation without effort.

## What are the benefits of using brainwave entrainment?



The benefits are the same as traditional meditation. The primary difference is that you experience the benefits faster with brainwave entrainment technology.

It's a well known fact that people who practice traditional methods of meditation usually require 5 to 8 years of disciplined effort before they realize deep positive transformations from their practice.

These transformations can be described as improving physical, mental, emotional and even spiritual well-being.

### **The benefits:**

1. The first noticeable benefit everyone experiences is stress relief.
2. You experience an increase in your stress threshold.
3. You feel calm, centred and optimistic.

Over time, due to a change in hormone levels in your body, you will:

- Experience greater vitality and look younger than your age.
- Think more effectively
- Be more creative
- Possess deeper insights
- Be more emotionally balanced and expressive
- Be more congruent in your actions and productivity

Your body is enabled to produce hormones essential for growth and rejuvenation.

Your stress hormones, cortisol, decreases as other hormones such as serotonin, catecholamines, DHEA, melatonin, endorphins and HGH increase.

### **Is there scientific and clinical evidence to prove the benefits of using brainwave entrainment?**

Yes.

Dr Vincent Giampapa, the head of Longevity Institute International and Past-President of the American Board of Anti-Aging Medicine, tested the effect of audio brainwave entrainment on hormones. He found increase levels in melatonin and DHEA, and reduced levels in cortisol.

### **To sun up briefly this is what they found**

In certain brain wave frequencies the brain releases numerous highly beneficial substances, including (HGH)human growth hormone. As we become older, the brain creates lesser quantities of these beneficial substances and we therefore develop various ageing symptoms and diseases.



- At the slower Alpha and Theta brainwave patterns, production of DHEA and melatonin increases significantly.
- One study noted an increase in DHEA of as much as 44%.
- Some even had DHEA increases of up to 90%.

Impressive and encouraging findings, I'm sure you will agree.

You can also find support for the therapeutic benefits of the use of brainwave entrainment in a peer review article, Comprehensive Review of the Psychological Effects of Brainwave Entrainment by Tina L. Huang, PhD; Christine Charyton, PhD.

It confirms the benefits of brainwave entrainment on super-learning, improved memory, I.Q, alleviating migraines and depression and enhancing creativity.

### **How does brainwave entrainment work?**

Our brain is like a electrical organ made up of billions of nerve cells called neurons. They fire electrical signals and oscillate in distinctive arrangements called brainwave patterns.

These patterns are closely connected to your thoughts, emotions, moods, biological chemistry, everything you do, and really, everything you perceive you are.

These electrical signals of the brain can be shown on EEG monitors. They look like wave forms. These wave forms are called brainwaves and are grouped into Beta, Alpha, Theta and Delta waves.

These brainwaves have been known to be associated with different peak mental states. For example:

- **Dreaming sleep:** Creativity, insights and problem solving abilities are known to be associated with *theta waves*.
- **Dreamless sleep:** Our body's growth hormones are mostly secreted in the *delta state*.

Let's be honest, the average person will never take the time or discipline to entrain their brain for optimal brainwave activity and therefore never achieve the heightened states of 'super consciousness' acquired by Zen, Tibetan and Shaolin Monks are not easily accessible.

Hence, the average person tends to under-achieve in life.

However, these states can be remembered and assessed through the use of neuro-technology such as brainwave entrainment.

### **Peak performance and whole brain functioning**



Brainwave entrainment stimulates these brainwaves through the use of carrier frequency tones that are inaudible to the ears but that the brain can register.

By repeatedly entraining the brain with these tones, your brain becomes conditioned to the frequencies and remembers how to activate brain states that correspond to peak performance states.

This state of performing at your highest potential is called whole brain functioning.

### **How do you use audio brainwave entrainment and what does it sound like?**

The most popular and effective brainwave entrainment is the use of audio recordings with headphones or earphones. When you listen to brainwave entrainment audios you will often hear soundscapes such as rainfall, forest streams, Tibetan bell, singing bowls. Some will include ambient music.

These sounds you hear do not create the brain entrainment. The entrainment is created by inaudible frequency tones or pulses embedded in the sounds. The soothing sounds that you hear mask the actual carrier tones or pulses.

These carrier tones and pulses are called binaural beats and/or isochronic tones. They are two vibrating or oscillating systems.

When they interact with each other they synchronize, and this synchronisation is what creates whole brain functioning and thereby an inner environment for you to produce and experience peak performance.

### **How do I use audio brainwave entrainment?**

In my experience it is best to listen to your brainwave entrainment audios for 30 minutes a day to start with. Once your brain is entrained (90 days) you may listen to 22 minutes twice a day.

When you listen daily for a period of time, you are exercising your brain. After a period of use, you seem to be able to reach those areas of your brain at will to perform functions that you would not have been able to do before.

I have found it most beneficial to get into a routine and either listen at night before bed or just upon waking up in the morning.

Do not listen while you are driving or working.

### **When can I experience the benefits?**

Instantly when you use it the first time. Those who use it within days experience deep relaxation and stress reduction.



I have had clients and ZenLama subscribers report back to me that they are able to cope better with their work, think more clearly and generally feel more contented with life.

From what I have seen, I'm also certain that you will feel more connected with your environment and both feel and appear to be more at peace grounded and poised.

What's more, as your brain entrainment practice develops and your left and right brain are being entrained to communicate with each other more effectively you will experience increased physical, mental and emotional well-being.

### **Who will benefit from brainwave entrainment?**

Everyone so long as you are above age 17 and is not suffering from epilepsy or is wearing a heart pacemaker. You should also not be pregnant.

In general brain entrainment is a good self-help and self-actualization method for folk who suffer from stress. Its great for people find it hard to concentrate (or pay attention). Research shows that it is very effective as a way to regain and maintain their attitude and physiology of youthfulness. And of course it is a key self-improvement method and discipline for those who wish to get ahead in life through expanding and living their true potential.