# **Discover the Mind Magic of Good Brain Waves**

Your guide to accessing the higher awareness: home to Intuition, Insight, Creativity, Imagination, Understanding, Thought, Reasoning, Intent, Decisions, Knowing, Will, Spirit and Soul



## Warning: Do not use listen to these CDs or MP3 audio files if you are:

- driving
- using machinery
- undergoing psychiatric treatment
- epileptic

Allow yourself at least 3 minutes after listening before engaging in any tasks of responsibility.

#### **Brainwaves Explained**

The brain uses several frequencies of electromagnetic energy at any given time. The many billions of neurons fire in patterns, contributing to brainwave frequencies. These frequencies vary and can influence your state of 'consciousness', making you feel alert, relaxed, creative, sleepy etc. They can even enhance learning. The frequencies are as follows:

- Delta (1.5 4 Hz): Deep, dreamless sleep
- Theta (5 8 Hz): Relaxed, daydreaming, meditative and creative states
- Alpha (9 14 Hz): Rest, reflection.
- Beta (16 24 Hz): Concentration, alertness, improved memory.

As an example, prolonged freeway/motorway driving can create a Theta state. This is evidenced when long portions of a journey can't be remembered, highlighting the altered state of consciousness. Great ideas are often reported during these periods.

Deep sleep is a Delta phase. However in 90 minute cycles, the frequency increases to Theta, when active dreaming and rapid eye movement (REM) occurs.

In ordinary life, states of consciousness are created by internal and external events. Internal systems include thought processes, circadian and ultradian rhythms, autonomic processes, habit and physiology. External events could include demanding tasks, environmental factors, drugs, sensory information. Specific states of consciousness can be learned as adaptive behaviour to particular circumstances, such as relaxation when getting into bed, or alertness at a loud and unexpected sound. Binaural Beats are an ideal way to provide the stimulus for the induction of certain states.

### What are Binaural Beats?

After 5 minutes of listening to Binaural Beat Frequencies, EEG recordings show that vast areas of the brain can resonate and synchronise, creating changes of awareness. Binaural Beats take advantage of a natural process known as the frequency following response (FFR): the tendency for neuronal energy to resonate at the same frequency as an outside source. Natural brainwave rhythms are therefore influenced by presenting the mind with set frequencies. These are generated from two tones of varying pitches (each tone below 1000 Hz, with the difference being between 1 and 30 Hz). One is presented to each ear, combining into a single third 'beat' frequency within the mind. For example, if a tone of 300 Hz is presented to the right ear, and 320 to the left, a wave of 20 Hz is experienced within the perceptive mind, creating a resonance for thought processes to follow. The frequency following response is a common finding in physics (e.g. tuning forks) and electromagnetic waves are no exception.

When the brain follows lower frequencies and awareness is maintained, a unique state of consciousness emerges, a "mind awake/body asleep" state. Higher frequencies can lead to highly suggestive states of consciousness, where visualised goals and self-suggestions can be absorbed. The level and power with which this is achieved can rival the best techniques of self-hypnosis. Still higher frequency states provide alertness and a highly focussed mindset needed for optimal performance in tasks. Some states can limit perceptions of reality, whilst others can expand it, providing experiences that most could otherwise only achieve with drugs.

#### Synchronise the brain hemispheres

Each ear is 'hard-wired' to each brain hemisphere, but dominantly to the opposite. Each hemisphere also has its own sound processing centre (the olivary nucleus), receiving signals from each ear. The Binaural Beat is therefore produced equally within each hemisphere, allowing them to 'synchronise' to a level that is found in meditative and hypnogogic states of consciousness. In normal life brainwave frequencies are often 'off-key' or imbalanced. When the brainwave frequency is strong and consistent in both halves of the brain, you can reach what is known as a 'peak state'. You are fully 'in tune' with yourself, focussed, balanced and brimming with energy.

#### **Reset the Neurons**

During prolonged states of alert Beta rhythm, the chemicals used to create the electrical energy of the cell (potassium and sodium) can become imbalanced. This can cause mental fatigue, or a 'fried brain'. Beta is used for high mental output, such as debating, teaching, or concentrating. Theta rhythm is the antidote, and 5-15 minutes of it can restore the ratio to provide feelings of refreshed calm.

With Binaural Beat CDs, you don't fall asleep unless you choose to. Your awarenesses can increase and expand, giving you an unknown clarity of calm thought. You're free to explore issues, make good decisions, make goals, and program your mind in whatever way you want.

#### What do the MP3s sound like?

Digital Binaural Beat MP3s are a complex blend of beats, which differ slightly in each ear. Occasionally the blend of sound can create artefacts, or new sounds which can be either real or imagined. It may sound peculiar to begin with, even unlistenable, but once you 'sit into' and absorb the sounds they begin to wash over you. This is when the brain begins to resonate, and the rest is an interesting journey through altered states. Certain background noises may sound like white noise, but do not mistake this for a faulty product. This is part of the process.

#### How to make good use of Binaural Beats

Listen in a comfortable environment with little or no distractions. This includes physical distractions so try and prevent any noticeable pressures.

You must use stereo headphones, preferably the variety that cover the entire ear. The volume should block external noise, but the environment should be quiet anyway so don't damage your eardrums!

After a session of 15 minutes or more, you may feel refreshed, light, calm and clear-minded. Listening for the 30 minutes each day, particularly when combined with active goal setting and visualisation, can result in noticeably positive life changes. Repeat the experience regularly to build up an enhanced response, where the best results can be found. You can also enhance the results by experimenting with combining the binaural beats with:

• Music (played through another system)

- White noise (played through an untuned radio)
- Your own relaxation or self-hypnosis techniques
- Guided Imagery techniques
- Breathing techniques
- Humming / toning
- Physical exercise
- Autogenic training
- Detailed visualisation of goals to program the subconscious

Your own ultradian rhythms may also compete with the effect of Binaural Beats. Ultradian rhythms are a natural cycle of brainwaves that are characterised by changes in arousal and states of consciousness. This is why the MP3s have been produced to last 30 minutes. It helps if you allow your mind to wander unhindered. You can find yourself thinking of the strangest things, and then when you realise you are doing so, you know you are on your way (much like a daydream state). Thoughts and concepts may seem to make complete sense one moment and then be beyond all comprehension the next. When you meander between normal and super consciousness enough, you are literally surfing brainwaves!

This information is also available at **WWW.121hypnosis.com** All content and recording © 2013 W.Williams.