

Stress and the Brain

A key player to handling your stress levels and your wellbeing is indeed your brain.

What is stress from the view point of the brain?

Stress is a biological response controlled by the brain to a challenging stimulation of a physical or emotional nature.

From the brain's view point, everything can be perceived as stress. From walking down the street to handing a difficult report on time, it is all a question of the degree of stimulation.

We all know that our brain is responsible for the control of our physiology, our movements, our thoughts and emotions. After a stressful stimulation, the brain responds with the biological reactions necessary to put the individual experiencing stress on alert, engaging the fight or flight response of the sympathetic nervous system. An added consequence to consider with the well documented signs of stress response is a hyper active brainwave.

Depending on the level of stimulation from the stressing factor, the degree of response from the fight or flight mechanism varies. One part of our brain called the hippocampus has the ability to notice higher stress hormones levels in our system and to send signals to stop their production and put everything back in balance.

The problem comes in our current life styles with the constant stimulation of the fight or flight response which keeps our systems constantly on high alert with detrimental effects on our health and mind sets as a consequence of over active brain waves. Continuous levels of stress hormones in our blood stream will damage the neurones of the hippocampus and prevent the regulation of the stress response engaging us in the downwards spiral of chronic stress.

Using the brain to counteract the effects of stress:

The brain has the possibility to engage the parasympathetic nervous system which controls what we could refer to as the rest and digest response. Brain Education methods are based on the principle that we can control our brain intentionally much like we can control our hands or legs the way we want.

Engaging the brain in the rest and digest response is an important first stage in recreating the brain balance needed to enjoy a healthy brain wave. We have the power to educate our own brain to do so intentionally. Once the over stimulated fight or flight response returns under control, the true potential of our brain becomes possible to engage.

To create a healthy brain that can lead us in a positive and healthy life style where stress is well managed, our brain needs:

- Physical exercise
- Mind-body training
- Meditation and Relaxation
- Empowerment
- Spiritual Awakening

Basic exercises to counteract the brain's stress response mechanisms:

The easiest method to engage the rest and digest response of your brain is through appropriate vibrations that can harmonize and stimulate our brain waves. Our brain waves themselves are a form of vibration. Using vibration is a very natural way to regulate our brain activity. Mothers instinctively rock their young ones to generate a vibration that bring their child's brain wave down into a sleep or calmer pattern.

In the morning before the stimulation of stress comes your way, practice these 2 techniques for a few minutes every day:

1- Open your body up for comfortable breathing:

Stand comfortably your feet parallel and about shoulder width apart, bend your knees slightly to not exert too much pressure on your lower spine. Join the fingers of your hands together your thumbs knuckles facing your body. Bouncing on your knees with a comfortable rhythm, tap the knuckles of your thumbs repetitively on the centre of your sternum exhaling deeply. With each out breath, try to empty your chest of all tension while you keep bouncing on your knees.

Continue for 3-5 min, emptying your mind of all worries and thoughts with every out breath. Keep your eyes closed while you focus your attention on the physical sensations around the centre of your chest and imagine any discomfort or pain released with every out breath. Finish by taking a deep breath in and sweeping down the centre of your upper body as you exhale.



2- Create a happy brain wave:

After finishing exercise 1, sit down comfortably without leaning against the back of your chair. Keep your spine straight. Prepare yourself for Brain Wave Vibration training by taking a deep breath in and exhaling any tension of your body out. Focus your attention on the back of your head, at the point of pivot between your head and neck. This allows your attention to connect with your brain stem. Gently start nodding your head back and forth with a comfortable rhythm. Focus on the rhythm created and let it grow as your head becomes free to shake in any direction it wants. The brain wave vibration technique will very directly affect your feeling as you keep visualising yourself bright and relaxed. Keep following the rhythm which now travels down your spine engaging your shoulders and upper body as well as your head and neck. To loosen up more into the rhythm it helps to intentionally maintain a light smile while practising. Keep going for as long as you wish. Finish by slowing the rhythm down and bringing your focus on the centre of your body. Breathe comfortably focusing on the centre of your abdomen while feeling the clear and peaceful sensation in your brain.



For a visual introduction to Brain Wave Vibration, please **click on the following link:**

<http://www.youtube.com/watch?v=xxaGMR-DPJE&feature=related>

For more information on Brain Wave Vibration please **click on the following link:**

<http://www.youtube.com/watch?v=gms6CcBFkmc>

At night, if you have had too many stimulation during the day, again use a vibration exercise to bring your brain wave down and allow yourself a sound and deep sleep. As you lay on your back in your bed ready for sleep, leave some space between your legs and rest your hands on your abdomen. Focusing on your breathing, gently turn your feet in and out, in and out in rhythm engaging the whole length of your legs so that even the hips are in movement. As the rhythm develops it will feel like you are simply shaking your legs. This exercise if done for 2-3min at night will release the tension accumulated in the brain and lower the brain wave before sleep. When you finish the exercise relax your whole body completely focusing on a comfortable abdominal breath and let yourself drift off to sleep.



For more information on Brain Education, the International Brain Education Association and Body & Brain Holistic Fitness centres, please visit:

www.bodynbrain.co.uk

2 hours introductory seminars are available two Tuesday evenings every month in Hammersmith. London. Please contact us for more information.