**Types of Brain Wave**

|  |  |  |
| --- | --- | --- |
| **Brain Waves** | | |
| **Name** | **Frequency** | **Characteristics** |
| **Lamda** | ~200Hz | Self awareness, higher levels of insight and information. Tibetan monks that walk barely clothed for days through the snow have exhibited high levels of these. They are difficult to measure and little is known about them. They are carried on the very slow moving Epsilon Waves (<0.5Hz). |
| **Hyper Gamma** | ~100Hz |
| **Gamma** | 38 - 90Hz | Important in harmonizing and unifying thoughts processed in different parts of the brain. Combines different perceptions. Suppressed totally by anaesthetic. Found in all parts of the brain. Self awareness and insight. |
|  | 40Hz | The core frequency. Important in cognition, especially coordinating simultaneous processing in all parts of the brain. Deficiencies exhibit learning difficulties. Produced during hypnotic states. |
| **Beta** | 12 - 38Hz | Wide awake, alert, focused, analyses and assimilates new information rapidly, complex mental processing, peak physical and mental performance, cannot be sustained indefinitely otherwise exhaustion, anxiety, and tension result. |
|  | 15Hz-18Hz | **Mid Range Beta** Neuro-feedback training that produced alert behaviour, useful in depression cases. |
|  | 12 - 15Hz | **Low Beta** Also known as Sensory Motor Rhythm (SMR) - vigilance, reduced mobility, shallow breathing, less blinking, fixed attention and eye focus, enhancing through neuro-feedback reduces epileptic symptoms and has a calming effect (ADHD sufferers). |
| **Beta-Alpha** | 12Hz | Hyper-efficient in processing single tasks as it can focus on the details as well as the overall task at the same time |
| **Alpha** | 7.5 - 12Hz | Mental coordination and resourcefulness, relaxation, alert but not mentally processing anything, inward focus, calmness, at ease, deep breathing and closed eyes can amplify alpha production, peak around 10Hz. |
| **Alpha-Theta** | 7.48Hz | Primary ionospheric resonance (Schumann) frequency. Stimulates retrieval of memories from the subconscious. |
| **Theta** | 4 - 7.5Hz | Memory access, learning, deep meditation, sensations, emotions, the threshold of the subconscious, dreaming. |
|  | 6.2 - 6.7Hz | **Frontal Midline Theta** - Cognitive activity, maths problems, sustained attention, extrovert personality, low anxiety |
| 4.5Hz | Shamanic trances, Tibetan mantras, Buddhist chants all use this frequency to access altered states |
| ~4Hz | Object naming |
| **Theta-Delta** | ~3.5Hz | Long term memory access |
| **Delta** | 0.5 - 4Hz | Deep sleep, human growth hormone release, low blood pressure, low respiration, low body temperature. No muscle movement - Reticular Activating System (RAS) shuts this down. |
| **Epsilon** | <0.5Hz | The state Yogi's go into when they achieve "suspended animation" where no heart beat, respiration or pulse are noticeable. |