

Wave	Frequency	Associated Mental State
Gamma	27 Hz and up	Gamma is associated with the formation of ideas, language and memory processing, and various types of learning. Gamma waves have been shown to disappear during deep sleep induced by anesthesia, but return with the transition back to a wakeful state
Beta	12hz - 27hz	Wide awake. This is generally the mental state most people are in during the day and most of their waking lives. Usually, this state in itself is uneventful, but don't underestimate its importance. Many people lack sufficient beta activity, which can cause mental or emotional disorders such as depression and ADD-and insomnia. And low SMR production (a sub-range of beta at 12-15hz) may be related to insomnia. ⁹ Stimulating beta activity can improve emotional stability, energy levels, attentiveness and concentration
Alpha	8hz - 12hz	Awake but relaxed and not processing much information. When you get up in the morning and just before sleep, you are naturally in this state. When you close your eyes your brain automatically starts producing more alpha waves. Many studies monitoring the EEG activity of experienced meditators have revealed strong increases in alpha activity. Alpha activity has also been connected to the ability to recall memories, lessened discomfort and pain, and reductions in stress and anxiety.
Theta	3hz - 8hz	Light sleep or extreme relaxation. Theta is also a very receptive mental state that has proven useful for hypnotherapy, as well as self-hypnosis using recorded affirmations and suggestions.
Delta	0.2hz - 3hz	Deep, dreamless sleep. Delta is the slowest band of brainwaves. When your dominant brainwave is delta, your body is healing itself and "resetting" its internal clocks. You do not dream in this state and are completely unconscious.

Brain Wave Frequency and Associated Mental States

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