

The Science Behind Healing with Sound



There's growing interest in using sound frequency to boost human health. And research backs it up.

In the realm of healing techniques, sound work inhabits a curious space: It has been used for thousands of years—think of overtone chanting from Central Asia, for example—yet, it's also on the frontiers of modern neuroscience.

Sound work is “creating a frequency and vibration for someone that's conducive for him or her to heal,” says Joshua Leeds, the author of *The Power of Sound* and an expert in the field of psychoacoustics, the study of the effects of sound on the human nervous system. “Sound healing is trending up. It's like where yoga was 15 years ago. People are realizing that sound is a viable medium to address distress, enhance learning, even work with an autistic child.”

Much of the current work is based on the early '70s research of biophysicist Gerald Oster. Oster showed that when a tone is played in one ear and a slightly different tone is played in the other ear, the difference causes the brain to create a third, internal tone, called a binaural beat. The theory is that this syncs the brain waves in both hemispheres, a process dubbed “brain-wave entrainment.”

“When the brain is in synchronicity, there's more focus,” says Carol Moore, marketing director of Monroe Products, which makes Hemi-Sync verbal meditations and music that contain embedded binaural beats. For example, “Our sleep titles help drop you into the deep delta waves. Electrical activity in the brain gets slowed down.” Some of the products are designed to help people recover from a stroke or surgery, deal with chronic pain, or become more relaxed while undergoing chemotherapy. “You might envision the drugs as a love potion, rather than poison. It's creating a state where you can say, ‘This is coming into my body to heal me, not to do damage to me,’ ” says Moore.

Brain-wave entrainment isn't without its skeptics, but some research supports it. In 2008, the journal *Alternative Therapies in Health and Medicine* published a review of 20 studies of brain-wave entrainment and patient outcomes. The conclusion was that brain-wave entrainment is an effective tool to use on cognitive functioning deficits, stress, pain, headaches, and premenstrual syndrome.

The studies also suggest that sound work can help with behavioral problems. "Different brain-wave patterns affect emotions," says Bill Harris, who created Holosync products. His system uses sounds like rain and crystal bowls—there's no beat or melody—with a pulsing tone underneath. He also uses custom affirmations, which people record in their own voices. "You're practicing going into a brain-wave pattern. It causes the brain to organize at a more complex level. It takes what you can handle emotionally and intellectually and pushes it higher," says Harris. "I'm not claiming this cures cancer. But it does have a profound effect on people's physical health. A lot of people come to us for chronic pain, irritable bowel syndrome, psoriasis, things that are exacerbated by stress."

Sound can increase immunity and treat insomnia, according to Jamie Bechtold, a Los Angeles-based sound healer. "Most people come to me for stress and anxiety," she says. For woes like pulled muscles, colds, and headaches, Bechtold uses tuning forks on acupuncture points. "I've seen back muscles that are spasming completely relax using this vibration." Bechtold also combines gong performances with yoga classes. "Recorded music is fine, but with live music you can feel it. The floor is vibrating. The sound waves are bouncing all over the place."

Jeffrey Thompson, founder of the Center for Neuroacoustic Research, says different frequencies target the various densities in the body. He uses a vibroacoustic sound therapy table. "As the frequencies slow down, from 500 to 400 hertz (a hertz is one cycle per second), you feel it more in your muscles, then your joints, then in your bones. We can give a vibrational massage, down all the way to your cells. I can do cranial work with sound, work on organs. You're finding frequencies to elevate the body's cells to a super-healing state, rebuilding more tissue," Thompson says.

"There's more on sound science than ever before," says Leeds. "We know what is happening molecularly." In the future, he says, "What we think of as sound healing will be called frequency medicine."

Previously published as "A Wave of Relief" in Spirituality & Health's Practice issue.

<http://spiritualityhealth.com/articles/science-behind-healing-sound>