

Music as Medicine

Music Soothes, Energizes and Heals Us

by Kathleen Barnes



As primeval drumbeats echo across an African savannah, the rhythms circle the globe, picked up by the chants and rattles of shamans gracing Amazonian jungles and Siberian tundra. They're repeated in Gregorian chants filling medieval cathedrals and "om" meditations sounding in Himalayan caves and yoga classes everywhere. They gently echo in the repeated tones of mothers' lullabies, happy hummings as we go about our day and the melodies of Mozart.

Music is the soundtrack of our lives, whether we're aware of it or not. It exists within, uniting and guiding us, and has helped heal body and spirit since the dawn of humanity. National Aeronautics and Space Administration scientists recently discovered that the universe itself has a song.

Pioneering Practitioners

From the soothing tones of a harp to the jarring screeches of a construction site, the stress-reducing or stress-producing properties of sound are familiar to us all. "Stress is an underlying cause of the vast majority of all illnesses, and sound and music are effective in relieving stress and bringing stillness," says Jonathan

Goldman, an internationally recognized pioneer in harmonics and sound healing and director of the Sound Healers Association in Boulder, Colorado.

Through researching his many books, including *The 7 Secrets of Sound Healing*, Goldman is convinced of the profound effect sound has on the human organism. "The simple chanting of the sound 'om,' or 'aum,' in addition to instilling calmness and relaxation, causes the release of melatonin and nitric oxide. It relaxes blood vessels, releases soothing endorphins, reduces the heart rate and slows breathing," he explains.

"Sound can change our immune function," wrote the late Dr. Mitchell Gaynor, former director of medical oncology at New York's Weill-Cornell Medical College for Complementary and Integrative Medicine in his book *The Healing Power of Sound*. "After either chanting or listening to certain forms of music, your Interleukin-1 level, an index of your immune system, goes up between 12-and-a-half and 15 percent. Further, about 20 minutes after listening to meditative-type music, the immunoglobulin levels in the blood are significantly increased. Even the heart rate and blood pressure are lowered. There's no

part of your body not affected. Its effects even show up on a cellular and sub-cellular level."

Practical Applications

Consider some of music's scientifically validated health benefits:

Stress: Singing, whether carrying a tune or not, is a powerful way to combat stress, according to many studies. A recent joint study by German and British researchers published in *Frontiers in Human Neuroscience* confirms that simply listening to soothing music results in significantly lower levels of the stress hormone cortisol. The more intense the experience is in singing or playing an instrument, the greater the stress reduction. A collaborative study by several Swedish universities showed that group singing caused participants' heart rates to synchronize, producing relaxation effects similar to that achieved through group meditation.

Cancer: Gaynor used music to treat even advanced cancer patients for decades, considering it a "disease of disharmony." He advocated re-harmonizing the body with sound vibrations that affect virtually every cell, especially enhancing immune function and potentially preventing cancer from spreading. Gaynor primarily used crystal bowls to produce deep relaxation and harmonize dysrhythmic cells in patients, but also confirmed the healing effects of certain vibratory tones of drumming and Tibetan metal gongs.

Several studies confirm that listening to any kind of soothing music relieves anxiety in cancer patients; a large study from Philadelphia's Drexel University confirms that it also relieves pain, lowers blood pressure, improves breathing and minimizes nausea associated with chemotherapy.

Depression: Drumming can better counter depression than the prescription drug Prozac, according to a recent study by England's Royal College of Music. Those that participated in a weekly drumming group experienced significantly reduced symptoms compared to a control group.

Substance Abuse: University of California, Los Angeles, scientists found that drumming was especially helpful for a group of Native Americans

struggling with such issues.

Smartphone Addiction: Korean research found that music therapy is helpful in overcoming this condition.

Immune Dysfunction: The same British study of drumming's antidepressant effects saw similar improvement in immune function, plus an anti-inflammatory response that continued for at least three months after the study period.

Neuroendocrine Disorders:

Researchers at Pennsylvania's Meadville Medical Center Mind-Body Wellness Group found that drumming effectively helped drummers (skilled and unskilled) suffering from neuroendocrine disorders such as pituitary tumors and intestinal issues caused by disconnections between the endocrine gland and nervous systems. They further confirmed that group drumming reduced stress chemicals such as cortisol in the drummers.

Muscle Tension Dysphonia: Even tuneless humming sounds like "um-hum" can have a measurable therapeutic effect on individuals that have lost their voices due to overuse.

Pain: When a group of British citizens suffering from chronic pain joined a choir, a Lancaster University study found they were better able to manage their condition for improved quality of life. Just listening to harp music for 20 minutes decreased anxiety, lowered blood pressure and relieved pain in a group of U.S. heart surgery patients with short-term pain participating in a University of Central Florida study in Orlando.

Alzheimer's Disease: In addition to reducing the agitation and anxiety frequently accompanying Alzheimer's disease, researchers at Florida's University of Miami School of Medicine found that a group of patients that participated in music therapy for four weeks experienced increased levels of the calming brain chemical melatonin.

How It Works

"Humming or singing causes longer exhalations than normal, helping to naturally eliminate toxins and acidity," says Dr. Madan Kataria, of Mumbai, India, who has spawned 5,000 laughter clubs worldwide.

"We started experimenting with the vowel sounds and humming sound. An

NATURE'S HEALING SOUNDS

The calming sounds of rushing water and gentle breezes are well known; science is now confirming the therapeutic effects of singing birds. Belgian researchers confirmed that bird song helps drown out the stressful effects of traffic noise, and Korean scientists found it makes people feel less crowded. A study published in the *American Journal of Physiology* showed that it can even help regulate participants' circadian rhythms, contributing to restful sleep and overall wellness.

early unpublished humming study I did in Denmark showed that people that hummed anything for just 10 minutes were able to reduce their systolic blood pressure by 10 to 15 points, their diastolic by four to five points and their pulse rate by 10 beats per minute." Kataria found that people with breathing problems like asthma and emphysema experienced especially positive effects because it strengthened belly muscles used in breathing.

Kataria is also a fan of kirtan—Hindu devotional call-and-response chants often accompanied by ecstatic dancing. "Kirtan takes away self-consciousness or nervousness and anxiety," he says.

Dr. Eben Alexander, who recorded his near-death experience in *Proof of Heaven: A Neurosurgeon's Journey into the Afterlife*, says the "indescribable" cosmic music he experienced has helped him come to understand the effects of specific sound frequencies on the brain. He now provides audio tools to help bring the brain to a higher state and help it match that higher and more conscious state. In his medical practice in Charlottesville, Virginia, he often employs music from a patient's past to help them emerge from a brain injury or coma and even "reconnect pathways in a damaged brain."

Alexander explains that binaural beats and other sound effects combine to create "brain entrainment" and also in theory, "monotonize" it to free awareness and access realms other than the physical. "It's magical what the right type of music can do to the brain stem to free up our consciousness," he observes.

No Talent Needed

Experts agree that people without musical talent are able to experience the same benefits as virtuosos, based on their degree of engagement with music. Anyone can hum, and most

research confirms that benefits are enhanced in creating music rather than merely listening to it.

Group singing has become increasingly popular, especially following the hit TV show *Glee*. *Time* magazine reported in 2013 that 32.5 million American adults sang in choirs, up about 30 percent from a decade earlier.

The choice of musical genre matters. Recent data from Montreal's McGill University shows that types of music tend to have specific effects; for example, blues slows heart rate and calms an anxious person, rock and punk can boost energy, and reggae can help control anger.

Spirit Moves

The spiritual aspects of virtually all types of music cannot be underestimated, says Michael Hove, Ph.D., a cognitive neuroscientist affiliated with Harvard Medical School and Fitchburg State University, in Massachusetts. His research has primarily focused on drumming to induce altered states of consciousness that shamans from diverse cultures use to bring about physical and emotional healing. What Hove calls a "boring and super-predictable" drumbeat of 240 beats a minute induced a deep trance state within minutes in most subjects, and brain scans confirmed that it enabled them to focus intensely and block out distracting sounds within eight minutes.

This aligns with Alexander's view that, "The sound of music is absolutely crucial in launching us into transcendental awareness. For the true, deep seeker, sound and vibration and the memory of music can serve as a powerful engine to help direct us in the spiritual realms."

Kathleen Barnes has authored numerous natural health books, including her latest, [Our Toxic World: A Survivor's Guide](#). Connect at [KathleenBarnes.com](#).