

**This is an encore presentation about humming, as more positive interlude before more articles about the medical system and its corruption.**

THE HUMMING EFFECT BY JONATHAN AND ANDI GOLDMAN

Book Report and Commentary by David G. Schwartz, M.D.

Of all the books written about sound and healing, and vibrational medicine, this is the first, to my knowledge, ever written specifically about humming, and its health benefits. Anyone can hum if the nose is not plugged and the mouth can be closed, and being able to carry a tune is not necessary. Jonathan Goldman has spent many years studying sound and its effects on health, and has written many books about it, including Healing Sounds, The 7 Secrets of Sound Healing, and Shifting Frequencies, among many others. He and Andi lead many workshops (one of which I attended).

One of my previous articles reviewed Barry Goldsteins' The Secret Language of the Heart, how music benefits the physical, electrical, and the emotional heart, as well as all body systems. Other books recommended by Jonathan Goldman are: The Healing Power of the Human Voice, by James D'Angelo, how singing, chanting, and laughter contribute to better health, Self-Healing, by Ranjie Singh, about stimulating the pineal gland to produce melatonin by self-created sound, Vibrational Medicine by Richard Gerber, how acupuncture, homeopathy, color, and light heal by vibrational energy, Healing Bees; Creation, by Valerie Solheim, about the healing effects of listening to the humming sounds of a beehive, Cymatics: A Study of Wave-Phenomena and Vibration, by Hans Jenny, how sound affects physical matter, and Human Tuning, by John Beaulieu, ND, PhD, Tuning the body with tuning forks. I also wrote an article about laughter.

The following is my introduction to the area of vibrations and healing. Hang onto your hats folks, for a wild ride through quantum physics. Solid matter is not really solid in that it is mostly composed of what appears to be empty space with minute particles that are constantly vibrating and can be either particles or waves (frequencies or vibrations), depending on the observer. Now, if that sounds confusing, that's just quantum physics. There's more about that later. All of our cells in our bodies are constantly vibrating and are communicating with each other with electromagnetic frequencies. Each cell and each organism has its own vibrational frequency. Glass can shatter with the sound of a voice if the sound is at the natural vibrational frequency of the glass. A bridge can collapse if the wind moves it in a rhythm that is the same as the natural swinging rhythm of the cables. The vibration of everything carries a powerful energy.

Regarding sound, most religious traditions say that everything began with a sound, a word, or a bang. Astrophysicists say that there is a signal coming from the universe through billions of light-years through space, maybe from the "big bang" itself. This signal is not a sound as we know it, because sound needs a physical medium, but if converted to sound, it would sound like a hummmmmm. Religious faiths make use of humming sounds chants, songs, and prayers. (Shalommmmm, Salimmmmm, Amennnnnnnn, Ameennnnnnnn, Ommmmmmmm). They must have discovered something very important about humming.

The inventor, Nikola Tesla said, "If you want to find the secrets of the universe, think in terms of energy, frequency, and vibration."

Now, what about quantum physics? What does that confusing, strange phenomenon have to do with our lives? In our usual activities, we think in terms of gross physical objects governed by what we perceive as Newtonian laws of physics, gravity, inertia, movement, force, energy, etc., but we forget

that smart phones, global positioning systems, artificial intelligence, etc., would not exist without an understanding of quantum physics and using those principles to invent and program these devices. This theory says that everything exists in a quantum field of infinite possibilities, and that things or events or vibrations are affected by the act of observation by humans. The position or the velocity of an electron or its existence as a particle or a wave, depends on its being observed. Then to add further confusion, the nuclear physicists say that the basis of everything is something like “strings” that vibrate, and to make sense of it, they say, “It’s all “mind-stuff.” Does all this mean mind creates matter? Mind is matter? Mind over matter? When we hum with intention, do we affect matter on a quantum level?

Next, what may seem even stranger is the placebo effect, which has never been scientifically explained, yet is well known in medicine. Medical scientists always have to account for the placebo effect before it can be proven that any intervention causes a change in anatomy or physiology or biochemistry that results in improved health outcomes. About 30% of the time, actual physical improvement, healing of tissues occurs as a result of the placebo effect, even if the subject or patient knows that it is a placebo, that is, an inert pill or potion that has no active drug or substance in it. So to do a scientific study, there has to be a group of people who are given a placebo. If the people taking the active drug have improvement no better than the placebo group, it has no actual effectiveness by its presumed mechanism of action.

Now, for enhancing the power of the placebo, the more the patient believes that the intervention will work, the more positive, comfortable, feeling the patient has toward the substance in question, the more strongly the health care provider believes that it will work, and the more pleasant attitude the provider has toward it, all these factors strengthen the placebo effect. On top of that, the positive healing relationship between patient and provider, the patient’s belief in the healing power of the provider, and the trusting relationship between the two, all make the placebo effect stronger. No one has been able to explain why all these mental, emotional, and relationship factors can produce this change in physiology, blood pressure lowering, remission from cancer, regeneration of tissues, etc. This may be the quantum field being affected by the mind, and then the quantum field produces the visible results. To simplify, the mind can heal the body.

Prayer, meditation, breathing practices, acupuncture, light and color therapy, healing touch, Reiki, Yoga, Tai Chi, Chi Gong, etc. may have direct physical effects, and they also affect the subtle energy that may not be felt physically, but they can be very effective. This energy is sometimes called Chi, or Prana, in some Eastern traditions. This is all vibrational medicine, likely based on the quantum field.

So why do I give such a long introduction? I wanted to show that as the authors use sound, it has the health benefits of the actual physical vibration effects, but also the subtle energy effects when a healing intention is added to the sound. Sound + intention = healing.

The book discusses the technical aspects of sound itself. A sound made by a musical instrument or a human voice has not just one frequency or pitch, but strings or reeds or vocal cords have many overtones or multiples of the original frequency, and each overtone has its own overtones, extending into the ultrasound and infrasonic ranges, that is, above and below the audible frequency ranges. The richness of the sound, its “timbre” or “color,” based on the proportions of which overtones or harmonics are emphasized, depends partly on the container (the organ pipe, the guitar body, and how the cheeks and throat are held).

The body's cells have their vibrational frequencies, and in good health, they are in a harmonious pattern with each other. In states of poor health, there is dissonance among the cells. Energy is blocked. Toning a sound with rich harmonics and overtones help bring the frequencies of the various parts of the body's "orchestra" in harmony or in tune with each other, and healing occurs. This may occur with "entrainment," to be discussed later.

An example of how a sound in the throat can be transmitted to other parts of the body is purring. I saw a PBS program, "Nature," about cats, large and small cats, wild and domestic. They all purr. The purring strengthens their bones, especially after an injury. I asked Jonathon Goldman about that. He said that, yes, the frequency of the purr, around 30-60 cycles per second, also strengthens human bones.

Here are some of the findings about humming's effect on the body: Reduced blood pressure and heart rate, stress reduction, and increased nitric oxide (NO) release. NO is the endothelial relaxing factor, helping arteries relax and to lower the blood pressure. Cells in a petri dish exposed to sound from a tuning fork released NO. Especially NO release in the nasal cavity helps open up the sinuses, to relieve pressure and drain mucus. I have begun to recommend humming to my patients who have sinus problems.

Don Campbell, sonic expert and author of The Mozart Effect says, "Humming actually massages the body from the inside out."

The other way sound can change the vibrations in the body is entrainment. Pendulums that are out of synchrony with each other can eventually swing together in rhythm. How do we explain that? Certain sounds can entrain with brain waves and the heartbeat, changing their rhythms also.

Why does humming have a unique effect vs. singing or chanting, etc? The mouth has to be closed, and the nose open. If you want to feel the difference, cover your ears and make a vocal sound, for example, "Ahh." Then close the lips and hear the sound, "m-m-m." Notice how you can feel your whole head vibrating? This vibration can be transmitted into the chest cavity, and from that location to other parts of the body, especially if you vary the pitch, so each pitch can find its place. Opening the throat like in a yawn while humming can increase the resonance. I think voice training could augment the power of humming.

If humming vibrations travel throughout the body, releasing nitric oxide, lymphatic vessels and veins can improve in circulation. Another effect is increased oxygenation of cells, maybe due to the deep breathing required for a good hum. "Dr. Ranjje Singh has done work with humming, the pineal gland, and melatonin. In his book, Self-Healing: Powerful Techniques, he describes his work showing that subjects who hummed had higher levels of melatonin in their urine. Humming also releases endorphins, internally produced opiates, along with singing, music, dance, laughing, etc. Singing, humming, and making music, all release oxytocin, the "love and trust" hormone.

A specific Yoga practice called the "humming bee breath," humming with the ears and eyes closed, is said to improve function in nearly all aspects of the endocrine system, the cardiovascular system, nervous system respiratory system, and vocal quality.

The Goldmans have many stories of humming helping people recover from strokes, and improvement from neurological disorders. Many of these reports are not "gold standard," controlled studies, but they are significant in that the results are repeatedly reproducible. Since there is no significant harm that can come from humming, the standards of scientific proof do not need to be so

strict to justify recommending humming. With interventions that do not have conclusive proof, we just need to recognize the potential harm of avoiding other proven therapies and substituting the less rigorously tested therapy.

The authors describe practice sessions, and they have accompanying online audio recordings. They describe humming sessions for various situations and conditions. Basically, a generic practice session is once a day in a sitting position with 5 minutes of relaxed, deep breathing, 5 minutes of humming, followed by 5 minutes of relaxation and silence, and then allowing a few minutes to adjust to usual activities, coming out of the meditative state. Before beginning the session, the intent is encoded, for whatever goal is desired to result from the session. Humming + intent = healing.

I have begun to do these sessions, and afterward I feel a relaxed invigoration, visualizing my whole body buzzing with quiet energy.

These remarkable effects from a practice that people can do who don't even sing, deserve our attention, and who knows what other amazing things can come from this simple and fun practice?

Reading this whole book and listening to the audio can be very helpful for someone who wants to delve deeply into this interesting phenomenon.