

Proposed Titles:

A Beginner's Guide To Sound Healing

Sound Healing: An Enlightening And Inspiring Guide To Sound Therapy

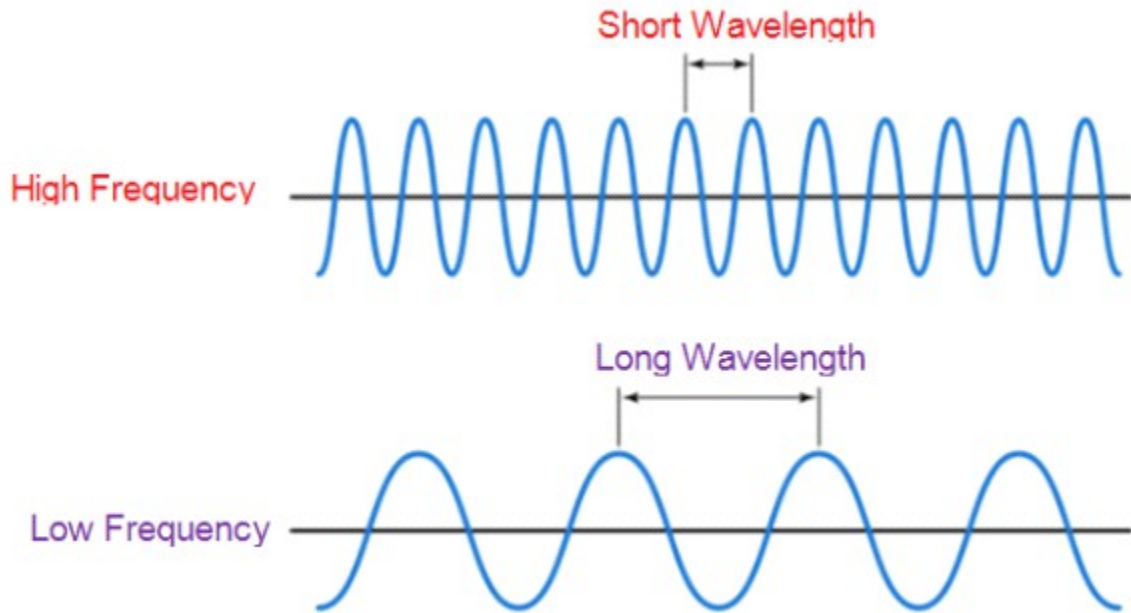
Sound Medicine: Using Music And Sound Vibration In The Healing Arts

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**Introduction:**

Sound and music are something that is all around us and which influence us in many ways, some of which we may be conscious of and some of which we may be unconscious of. Personally, I have been drawn toward exploration of sound and music throughout my life, listening to music as well as performing and composing music. Music and sounds affected my energy and emotions and were elements of my surroundings that shaped my life in significant ways. As I matured along my life path I was drawn to psychology and the healing arts. Sound healing brings these two elements of my life together and is one of a variety of holistic healing approaches I share with clients and groups I assist. I've often told myself that if there wasn't a need in this world for people to play the role of healing facilitator or counselor I would have pursued music as a vocation for the enjoyment and fulfillment that it brings. I feel fortunate that I have the opportunity to in some ways combine this passion for healing sounds and music with my wish to serve other souls on their path of healing and personal evolution.

Healing with sound is both an art and a science. Sound can be analyzed and measured, as it is a frequency and waveform phenomenon. Sound is a way of perceiving vibration, one of the 5 sensory mechanisms we use to experience or perceive what exists in our environment. Everything in Creation is vibration and is inherently in motion even if from our limited perspective it appears to be solid and still. Since sound is a way vibration can be perceived it could be said that everything that exists could be perceived as sound. Of course, in our human form we only experience a particular range of the frequency spectrum of vibration as sound. Even the electronic equipment which we use to record and play back sound only covers a certain frequency range - typically between around 20 Herz and 20,000 Herz. Herz is a measure of cycles per second. This means the sound wave oscillation repeats its pattern that number of times within a one second interval. Wave and frequency have an inverse relationship to one another, so the more frequently the pattern repeats in a time interval the shorter the wave length must be.



When physical objects collide with one another or push against one another this creates vibration that we might experience as sound (we often experience the vibration with our feeling sense as well). Not everyone will experience the same vibration in the same way. A vibration that is hardly noticed by one person or organism could be experienced quite intensely by another person or organism. Many animals perceive vibrational energies that humans don't consciously perceive at all. Even though we may not consciously perceive a vibration it still interacts with the energy of our body and our aura (biofield or subtle energy bodies). We don't consciously notice ultrasound, infrared light, nuclear radiation, microwaves, and other energies, but they can definitely affect us.

Thus, with sounds in our environment we don't all respond to them the same way, since the programming of our bodies and of our conscious and subconscious minds are not all the same. Some people feel relaxed listening to classical music while others may feel irritated by it since it has an association for them with some past unpleasant emotional experiences. Some people may feel energized and uplifted by heavy metal rock music while others may become agitated or exhausted by hearing that music. With those examples in mind, we can recognize that even with healing sounds used therapeutically there may be some people who respond in a resistant way to sounds that other people usually find pleasant, relaxing, or harmonizing.

The art of sound healing therefore involves facilitating human interactions and resonance with sound with consideration for the nuances and individual nature of our experience of sound or vibration. It also includes the infusion of consciousness and intention into the creation of sound. Sound interacts with the vibration of the practitioner and the audience and it involves

resonance and realignment of our energy fields and our consciousness as we have those experiences.

Even people who are deaf due to impairment of the body's auditory processing mechanisms can experience the same vibrations that other people perceive as sound using different sensory modalities. Sound is truly a universal aspect of life. It has been found that the cells of all living organisms respond to both sound and light frequencies/waves. Sound has a profound influence upon us and can be used either to harm or create discord or to heal and promote harmony and coherence. Notice when a person yells at you. The sound vibration reflects the discordant emotion being expressed and when that vibration is heard and felt it typically generates a wave of unease or anxiety in the one listening. Notice when a person speaks to you with words of love, kindness, or appreciation. You immediately feel your emotional state shift in a positive direction. Sound patterns can resonate with emotional states and sound waves tend to resonate with the subtle emotional energy body that is part of our human biofield or aura.

Since sound resonates with our aura and the cells in our body it can quickly stimulate or relax the nervous system. Much of our mental and physical illness states are related to chronic stress or overstimulation of the nervous system. The nervous system has two main phases of activity which are known as the sympathetic and parasympathetic nervous system. For our autonomic nervous system the sympathetic pathway is the active, stimulated state, while the parasympathetic pathway is the resting and relaxing state. Typically these states of activity and rest are generated automatically without our conscious effort (thus the term autonomic). When we are in the stimulated mode too much we are using more energy than we are taking in, so we become drained and depleted. Healing requires having a chance to recharge so we can have enough energy to repair and recover from our periods of high activity. Sound healing is often used to help people shift into that relaxed state so that the mind can settle and the body can refresh itself and heal.

As described in WikiPedia,

*Sympathetic nervous system*

*The sympathetic nervous system (SNS) is part of the autonomic nervous system (ANS), which also includes the parasympathetic nervous system (PNS).*

*The sympathetic nervous system activates what is often termed the fight or flight response.*

*Like other parts of the nervous system, the sympathetic nervous system operates through a series of interconnected neurons.*

*Sympathetic neurons are frequently considered part of the peripheral nervous system (PNS), although there are many that lie within the central nervous system (CNS).*

*Sympathetic neurons of the spinal cord (which is part of the CNS) communicate with peripheral sympathetic neurons via a series of sympathetic ganglia.*

*Within the ganglia, spinal cord sympathetic neurons join peripheral sympathetic neurons through chemical synapses.*

*Spinal cord sympathetic neurons are therefore called presynaptic (or preganglionic) neurons, while peripheral sympathetic neurons are called postsynaptic (or postganglionic) neurons.*

*At synapses within the sympathetic ganglia, preganglionic sympathetic neurons release acetylcholine, a chemical messenger that binds and activates nicotinic acetylcholine receptors on postganglionic neurons.*

*In response to this stimulus, postganglionic neurons principally release noradrenaline (norepinephrine).*

*Prolonged activation can elicit the release of adrenaline from the adrenal medulla.*

*Once released, noradrenaline and adrenaline bind adrenergic receptors on peripheral tissues.*

*Binding to adrenergic receptors causes the effects seen during the fight-or-flight response.*

*These include pupil dilation, increased sweating, increased heart rate, and increased blood pressure.*

*Sympathetic nerves originate inside the vertebral column, toward the middle of the spinal cord in the intermediolateral cell column (or lateral horn), beginning at the first thoracic segment of the spinal cord and are thought to extend to the second or third lumbar segments.*

*Because its cells begin in the thoracic and lumbar regions of the spinal cord, the CNS is said to have a thoracolumbar outflow.*

*Axons of these nerves leave the spinal cord in the ventral branches (rami) of the spinal nerves, and then separate out as 'white rami' (so called from the shiny white sheaths of myelin around each axon) which connect to two chain ganglia extending alongside the vertebral column on the left and right.*

*These elongated ganglia are also known as paravertebral ganglia or sympathetic trunks.*

*In these hubs, connections (synapses) are made which then distribute the nerves to major organs, glands, and other parts of the body.*

*Note: The above text is excerpted from the Wikipedia article "Sympathetic nervous system", which has been released under the GNU Free Documentation License.*

Our sympathetic nervous system is activated by our perception of and our response to our environment and our experiences. It's not just what is present in our environment, it is how we perceive and give meaning to that stimulus and how we have been programmed to respond to it. We have the power and potential to reprogram or deprogram ourselves so that we don't get stuck in a fight or flight mode of activation so much. When we aren't reacting to things we don't

trigger our bodies to release the neurotransmitters and hormones associated with sympathetic nervous activity and stress. In life we do need a balance between rest and activity, so having things that stimulate our physical and mental activity is desirable. We just want to be cautious to not go to an excess or extreme that leads to disease and dysfunction.

### **Qualities And Characteristics Of Sound**

Sound waves and their interactions present a number of characteristics that affect how sound is experienced. This includes qualities and phenomena such as tone (frequency), decibels (intensity), intervals (distance between frequencies), rhythm (spacing between sounds), and timbre (the spectrum and shape or envelope of a musical sound). As these characteristics are modulated different effects can be experienced. Using the example of intensity, a sound that is low intensity may be experienced as gentle and soothing, while the same frequency of sound could be generated at a much greater intensity where it might be experienced as harsh and cause the listener to recoil or cover the ears to avoid having the auditory organs overloaded and damaged. This could be compared to having a hand that one uses to gently stroke and massage someone's skin to produce muscle relaxation, calm nerves, and better blood circulation. That same hand could strike a person with brute force and cause tissue damage and bruising.

For people who are hyper-sensitive to energies in their surroundings intense sounds can be disturbing or overwhelming. Those with sensory processing disorders and autistic spectrum disorders are often exhibiting that hypersensitivity, and while they often benefit from sound therapies it may need to be applied in a manner that is sensitive to their more reactive, less stable energy systems. Take notice of how people respond to different frequencies and intensities of sound so that you may select sounds which help open up and harmonize people's energies rather than triggering or increasing protective stress responses.

Conversely, there are some situations where initial pain or discomfort may need to be elicited as part of a therapeutic release process, though the person may need to be prepared and coached through that sensation. Think of acupressure therapies such as reflexology, where pressure is applied to different points and the points where pain or tenderness are felt are the areas where there is an energy imbalance. Allowing the pain and resistance to arise and be released actually helps rebalance the energy flow. This can occur with sound as well, so when a person experiences some pressure or discomfort in response to a sound they can surrender to the sound waves and allow the sounds to help clear the resistance that has been built up in that area.

There is a tendency to entrain to sounds in one's environment, so sounds can quickly affect our biological patterns and rhythms. When you hear music with a strong percussive beat you will probably feel different than when you hear music that contains meditative tones made with flutes, singing bowls, or vocal tones and lacks a beat. Some environments contain sounds that are supportive of our balance and equilibrium while other environments contain sounds that tend to disrupt or disturb our natural energy flow and lead us away from health and harmony.

## **Binaural Beats and Brainwaves**

One interesting effect from sound is how it influences brainwave activity. The discovery was made that when we hear sound frequencies that have an interval between them which corresponds to brainwave frequencies the brain will start to generate those frequencies. For example, if you hear a 250 Herz tone and a 255 Herz tone generated simultaneously your brain will generate a 5 Herz frequency, which is in the theta brainwave range. Different brainwave ranges correspond with brain activity facilitating different states of consciousness. The approximate brainwave ranges are labeled using the Greek letters delta, theta, alpha, beta, and gamma. Delta is the range between .5 and 4 Herz, which is predominant when our body is asleep. Theta is the range of approximately 4-7 Herz and corresponds with deep meditative states. Alpha is around 7-14 Herz and corresponds with being in a creative, imaginative state, while Beta refers to the range of 14-30 Herz and relates to being in a more alert, mentally active and focused state of consciousness. Gamma waves of around 40 Herz seem to relate to psychic phenomena. The binaural beat effect is most pronounced when the tones are played separately from one another into each of the ears using headphones.

One caution with the use of binaural beats involves individuals who have some types of epilepsy and seizure disorders. In some of those individuals there is a significant disturbance or impairment with the connection between the brain hemispheres. The area that connects the hemispheres is known as the corpus callosum. The corpus callosum consists of millions of nerve cell fibers that interconnect the two (left and right) brain hemispheres. The chief purpose of the corpus callosum is to integrate or coordinate the various motor, sensory, and cognitive functions between the cerebral cortex on one side of the brain with the corresponding region in the other hemisphere. Any type of stimulus that excites that connection could create a stress or electrical overload for a person with that form of impairment. Just as certain flashing light patterns have triggered seizures in susceptible individuals binaural beat patterns have the potential to trigger seizures in that subgroup. Nevertheless, since the brain is very responsive to sound it is possible to use sound and music to promote healing of the brain and nervous system in those with brain disturbances that cause seizures.

## **Resonance**

The word resonance can be used to describe a number of interrelated phenomena. A couple of its meanings, according to Dictionary.com are:

*Physics. the state of a system in which an abnormally large vibration is produced in response to an external stimulus, occurring when the frequency of the stimulus is the same, or nearly the same, as the natural vibration frequency of the system.*

*the vibration produced in such a state.*

*a hadron with a very short lifetime, of the order of 10<sup>-23</sup> sec.*

*Electricity. that condition of a circuit with respect to a given frequency or the like in which the net reactance is zero and the current flow a maximum.*

With sound, resonance can be observed with tuning forks that naturally generate the same frequency when struck. If one tuning fork is struck and starts vibrating and producing a sound of a particular frequency then you can bring that tuning fork into close proximity to another tuning fork that generates the same frequency and the 2nd tuning fork will start to vibrate as well, merely because the external frequency matches its own frequency. This has been referred to as mechanical resonance, and the phenomenon also includes what is called harmonic resonance, where other frequencies that are harmonically related to the original frequency (such as a musical octave) will also be affected.

A key principle to grasp here is that when two items or systems are operating at the same frequency or frequency range it is much easier for them to have an effect upon one another than if their frequencies are divergent. We can consider some of the electromagnetic frequency based technologies we use nowadays and how they operate. For example, if you have WiFi systems using a 2.4 ghz frequency then they can transmit data wirelessly via that frequency to other devices that receive that frequency. If the receiving device only operates with reception of 5 ghz then it can't go into resonance with the 2.4ghz device and thus can't communicate with it. If you have multiple devices using the same frequency then the waves they generate can start to interfere with one another.

In recent years there has been much discussion and concern about man-made electromagnetic frequencies and how they are impacting biological systems and human health. Since some of those technologically generated waves are of frequencies that are similar or identical to frequencies that are part of the spectrum of our own mind-body energy systems (and energy systems of other living organisms) there are often biological effects, as those frequencies can interfere with the energy patterns of living organisms.

For a wave or frequency to be perceived it must be in the range of perception of the person or device that might perceive it. There are many energy waves radiating all around us that we don't perceive. Energy waves that are exceptionally fast or slow relative to the layer of reality that we experience physical life in would be imperceptible. The subtle energy layers of our being exist in this way - vibrating at frequency ranges that normally aren't perceived, at least not directly. Since the frequency ranges have harmonic relationships with one another, the physical body and the measurable electromagnetic energies that pulse through it are affected by the "higher" frequencies (e.g. mental and spiritual energies) that aren't measurable with existing technology.

When we have a thought that thought is a form of energy that may charge up (activate) an emotion, and that emotion can affect a person's brainwaves, heart rhythms, and more. We can't directly measure the energy waves of the thought or emotion but we can measure the electrical patterns of the body that are influenced by those thoughts and emotions. Based upon the principle of harmonic resonance, a shift in one harmonic level of the system will trigger a shift in

other levels. For example, if you can provide an electromagnetic stimulus to alter brainwave or heart pulse patterns then the emotional state will likely shift as well. If your mental focus changes, such as from thinking about something distressing to thinking about a person you love or appreciate, then the activity of the organs in your body will change. This understanding helps guide our use of sound or other stimuli to foster healing and harmony.

At the HeartMath Institute music and sound have been used along with emotional focusing and appreciation exercises to help bring coherence to heart rhythms. To understand and manage the state of our physiology it is vital to understand and work with our consciousness and forms of vibration that regulate the biology. If we only focus on applying medical interventions at the chemical level we are in a sense ignoring or neglecting the vast majority of the energy system that governs our human existence!

### **Entrainment**

Entrainment is another concept used in physics to describe how systems are influenced by one another. We tend to naturally adapt to and seek equilibrium with our environment. This occurs both psychologically and physically. According to **Wikipedia**, *Entrainment in the biomusicological sense refers to the synchronization (e.g. foot tapping) of organisms to an external perceived rhythm such as human music and dance. Humans are the only species for which all individuals experience entrainment, although there are documented examples of entrained nonhuman individuals.*

Since sounds are such a powerful influence they can help entrain people into a variety of psychological states. If you watch any television program or movie you will likely find that the background music or score is designed to evoke emotions in the viewer to enhance the impact of the visual content. Sounds can be used to create a feeling of anxiety or suspense, a sense of joy or excitement, a feeling of sadness or nostalgia, and more. Historically, sounds have been used to stir armies to battle, to soothe crying babies, to facilitate spiritual and religious rituals, and to set the mood for romance. If you wish to change your mental and emotional state and transform your habits you may find that intentional use of sounds and music can be a valuable resource.

### **Musical Aspects Of Sound**

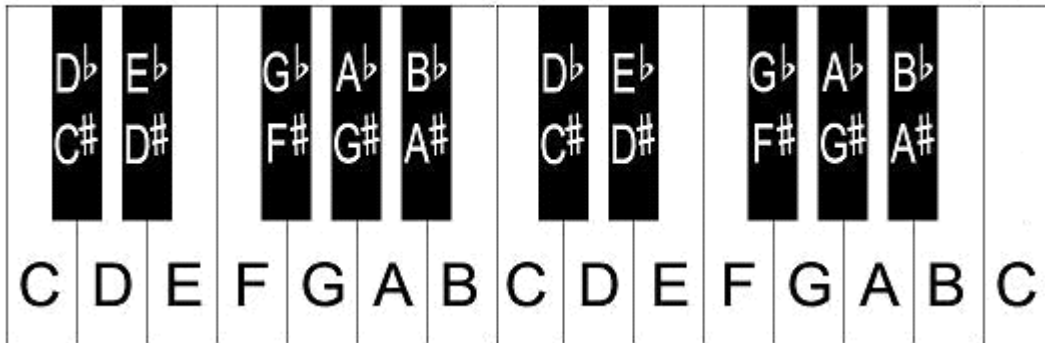
When sounds are assembled to form musical compositions there are some important elements which help form the structure of music. This includes melody and rhythm as well as musical chords and scales. Chords and scales are based upon the intervals between musical notes when they are played in a sequence or played simultaneous to one another. All of these variables influence how we experience and respond to sounds.

The system of music commonly used in our Western culture uses scales and chords based upon musical octaves, where there is a sequence of 8 notes with the last of the 8 notes merely being a higher harmonic of the first note of the scale. The sequence of Do-Re-Mi-Fa-So-La-Ti-Do is the



one that most readers are likely familiar with. The musical notes are given alphabetical letter names, and the 8 note sequence can be started with any musical tone and then follow the same pattern of intervals going up the scale. You can start with the notes of C, C#,D, D#, E, F, G, G#, A, A#, or B if you include the chromatic half steps between the 8 notes of an octave. Here are the notes depicted on a piano style keyboard:

## Chromatic Scale



In this system the notes with sharp symbols (#) are a half step above the note of the letter name before the sharp symbol. They can also be identified with a flat (b) symbol which represents being a half tone below the letter name note before the flat symbol. For example, the note C# is actually the same note as Db. In musical notation whether the note is called C# or Db would depend on the musical "key" that the music is composed in. The *key* is defined by the base tone and type of scale that are used in determining the notes included in the music. This means there are altogether 12 notes within the octave range in this system. This system does not include all the possible sound frequencies within that range, it only uses selected frequencies that are chosen based upon their intervals between one another. This is done to create the system of musical tones which have a meaningful order that sounds pleasant to us. Some of this will seem fairly technical or mathematical, and unless you are a musician you may not be that concerned with learning about all these aspects of musical structure. Just be aware that this structure and order used with music bring patterns that affect how we experience music and how pleasing (or not) it may be to listen to.

You may find it interesting that the musical octave concept (with its 7 notes before the sequence repeats in a higher frequency range) is similar to the 7 colors of the rainbow and the 7 chakras (energy centers) associated with the human body. There is also the acupuncture meridian system of the body which includes 12 different meridians or energy circuits going through the organs of the body. Not only does our body have organs - there is a musical instrument similar to a piano which is also called an organ. The organs in our body have to work together like an orchestra to support our well-being, and they all respond to sound.

## **Sound Healing Tools**

Anything that produces vibration which can be experienced as sound could potentially be a sound healing tool. From drums and rattles to gongs, didgeridoos, bells, metal or crystal bowls, flutes, harps, and chimes, people have used a variety of instruments to create sounds for healing. The first sound healing tool most people experience is the human voice. Vocal toning and chanting or singing are ways to create sound vibration that is generated from within the body. This can be a great self-healing tool. Of course, when you are using your own voice you are not able to relax and surrender to sound as deeply as when an external source is producing the sound. Thus, there are both benefits and limitations to using one's own voice for sound healing. Since the vibration is generated from within your body it is a very direct way to fill your body with vibration and help clear tension and resistance being held in the body.

## **Tuning Forks**

Tuning forks have traditionally been used to help adjust the tuning on musical instruments that have strings (such as piano, violin, or guitar). They produce a very clear, focused sound frequency that you can listen to as you are trying to get the sound frequency created by striking the string to match that sound from the fork. For those who like to work with specific frequencies for healing the tuning forks are a valuable resource. They can be manufactured with any tone you might desire. There are tuning forks with chakra and meridian tones, with musical scales, planetary frequencies, and more. Tuning forks can be waved or weaved through the aura (subtle energy field) and the tip can also be placed on the body. Some have extra attachments to help enhance the vibration of the tip against the body for a deeper physical effect.

A number of practitioners and researchers have developed methodical uses of tuning forks for healing. I have experienced multiple tuning fork modalities and have also completed training in some of these modalities. Healing with tuning forks includes modalities such as Acutonics, SomaEnergetics, Regenetics (DNA Electromagnetic Repatterning and Potentiation), and Biofield Tuning. When using tuning forks you may notice that there are subtle yet significant differences in the qualities of the tone depending upon the manufacturer and materials used to construct the tuning forks. I have personally found the Biosonics tuning forks (a company associated with acclaimed sound healer Dr. John Beaulieu) to be constructed in a manner that produces an optimal tone, while I haven't listened to forks from too many different manufacturers and there may currently be other companies that offer a similar quality.

## **Singing Bowls**

Singing bowls have traditionally been made by hand from metals and used in the Himalayan region of Asia by monks. Those traditional metal bowls are often called Tibetan singing bowls or Himalayan singing bowls. By taking a mallet (often called a striker or puja stick) and running it along the rim of the bowl a vibration can be sustained and a soothing sound created for the "singing" bowl effect. The hand hammered bowls have an uneven surface that leads to the generation of a variety of frequencies when the bowls are tapped or played on the rim. Besides

the main or dominant tone of the bowls there are other frequencies, called overtones, which create a more enveloping sound effect that is great for meditation and sound healing. Modern machine manufacturing methods are used now to create singing bowls also, and the smooth modern bowls don't produce the multiple tones from a single bowl that are found in the hand hammered bowls. Those using metal bowls in sound healing usually seek the traditional style bowls due to the acoustic and harmonic range that they present.

Crystal bowls are made with modern techniques and create specific musical tones. When crystal is vibrating in the circular manner that occurs as a bowl is played it produces a powerful, intense sound that seems to resonate through the whole room, echoing and enveloping anyone who is present. If you want the sound to carry or project well then crystal singing bowls are a great resource. Quartz crystal is a very pure material that won't leave any metallic smell or residue on your hands. Just be aware that crystal can shatter easily, like glass, and needs to be handled carefully. With crystal bowls the mallet that strikes or rubs the bowl needs to have a surface like suede, rubber, or silicone, that won't damage the crystal.

Singing bowls can be both soothing and calming as well as activating and stimulating. They are versatile and provide a reliable way to use sound vibration to shift consciousness (e.g. meditation) and to clear and refresh energy systems (e.g. sound baths, bodywork, and energy healing). While the Crystal Tones company pioneered the development of modern crystal singing bowls there are now many other manufacturers producing bowls that are created using the same methods. Crystal Tones has come to specialize in crafting bowls that fuse crystal with other elements (e.g. various metals and gem stones) for unique sounds and metaphysical properties. Those fusions are called alchemy bowls and are usually expensive investments. Crystal bowl playing beginners tend to acquire the classic frosted or clear quartz crystal bowls when starting to practice with these beautiful instruments.

During singing bowl healing sessions, meditations, or sound baths, people can have a variety of experiences. Sometimes participants become very relaxed and may even fall asleep. I have had participants in the sound healing sessions I facilitate see colors, have visions, out-of-body experiences, contact deceased loved ones, and retrieve memories from childhood and even other incarnations (past lives). Some participants have physical reactions such as twitches and muscle releases in their bodies, and others may experience temporary sensations of pressure in parts of their body. I have had many individuals report the disappearance of pressures or pains that they had before attending the session. Since the sound waves naturally clear tension and restriction in the energy field people tend to feel lighter and more open and free after a sound bath healing.

## **Drums**

Drums are percussion instruments that are generally used to create beats and rhythms. Since our minds and bodies are responsive to rhythms that we feel or hear drums can be used to help shift our mental focus and to affect the rhythms of our bodies. Shamanic drumming has been

used in cultures throughout the world to guide people into altered states of consciousness and to facilitate community gatherings and spiritual rituals. The sound of the drum creates a rhythm that everyone present can entrain to. The deep vibration of drums produces low frequency sound waves that tend to stimulate and influence the lower chakras. If you are doing healing work to help clear the lower energy centers of stuck, dense energy, then drums can be a useful resource. Speeding up or slowing down the rhythm of drum beats can help shift one's state of consciousness, making drums a useful tool for different forms of meditation, visualization, and hypnotic journeys.

### **Didgeridoo**

The didgeridoo is an instrument traditionally made with hollowed wood and blown through to create a droning sound. This instrument originates with the Australian aboriginal culture. In the modern era some didgeridoos are made with synthetic materials or even crystal. The sound of the didgeridoo helps foster trances and meditative states while the vibration produced can also help clear and realign energy fields.

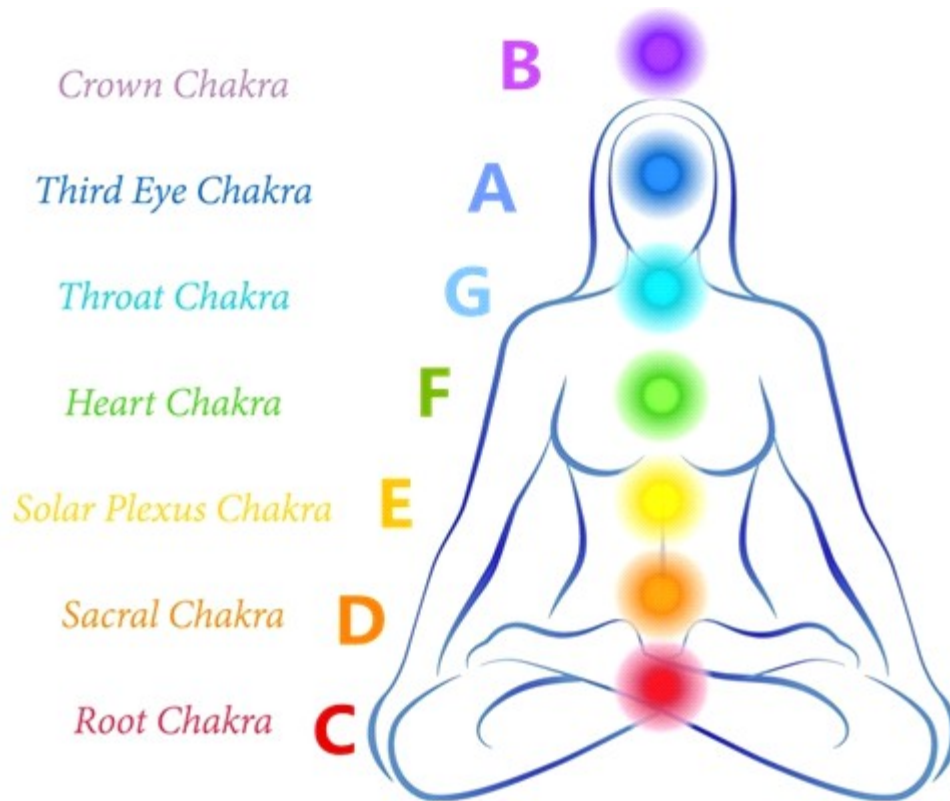
### **Chimes**

Chimes are instruments that are typically rung to create gentle, calming tones. Most people are familiar with wind chimes that are activated by a breeze. There are also chimes that can be tapped with a mallet and used to help settle the mind for meditation. In Tibetan traditions a type of chime that is used is called a tingsha, where metal discs are tapped together to make them both ring with slightly different tones from one another.

### **Chakras & Chakra Tones**

Chakras are subtle energy centers that connect our physical body with our energy bodies (aura) and field of consciousness. Each chakra is located over an area of our body and corresponds with an aspect of our life experience. Chakra is a Sanskrit word that means "wheel of light." The chakras have Sanskrit names while in the West we use words from our own language to label them.

1. Root Chakra - Muladhara
2. Sacral Chakra - Svadisthana
3. Solar Plexus Chakra - Manipura
4. Heart Chakra - Anahata
5. Throat Chakra - Vishuddha
6. Third Eye Chakra - Ajna
7. Crown Chakra - Sahasrara



In sound healing it is common to use a sequence of musical tones going up a scale to resonate with the chakras. Usually people use the "C" scale with the C note at the root followed by D, E, F, G, A, and B for the other chakras. However, I have found that people listening to the tones will experience a similar effect of the chakras being activated by the ascending tones even if you begin with a different note for the root and then go up a scale of similar intervals with tones for the other chakras. In general lower frequency tones tend to be experienced more strongly in the lower chakra regions and higher frequency tones tend to be perceived more strongly in the upper chakras.

It is suggested that you experiment with the tones and just notice how you experience the sound and vibration in your own body and your own being. Part of the process of sound healing is using attention, awareness, and intention. By bring your attention to yourself and your interaction with the sound vibration you are opening yourself up to experience resonance, healing, and transformation. This is a dynamic process that involves the consciousness of the listener. You can set an intention to invite the sound waves to help you release any patterns of discord or density within yourself that don't serve your well-being or personal growth. It may feel at times as though you are immersed in sound waves and sort of merging with them. Notice any shifts in your energy, your thoughts, and your emotions as you have the sound healing experiences. You will often notice tangible effects physically also, such as less muscle tension or pain, greater flexibility, and improved cardiovascular function and immunity.

### **Sound, Music, & Emotions**

As a skilled energy healer I frequently work with "chi" or "life force" based energy healing methods to help shift the energy field and emotional state of clients. While this is often a very effective method, I have found that with a certain percentage of clients there is a much better response to sound vibration. When a person is in a highly anxious or agitated state the sound provides a stimulus that helps bypass any resistance provided by the conscious mind. Also, sound waves can be much more intense and overpowering than the subtle energies that are projected through a person's hands or aura. When a person's energy field is highly agitated and chaotic it may need a very powerful coherent energy wave input to help restore harmony. A sound such as a singing bowl can provide that very strong and coherent waveform.

Clinicians have found that sound and music are very useful for helping ease anxiety for people suffering from dementia or psychosis. Rather than giving those individuals cognition impairing (and often addictive) tranquilizer drugs wouldn't it be great if we could help them calm down just by using therapeutic sounds and music? I have personally watched this occur and I believe that this is a safe and effective alternative to many psychiatric medications.

"Music hath Charms to sooth a savage Breast, To soften Rocks, or bend a knotted Oak." - William Congreve

### **Cymatics**

One more interesting phenomenon to consider in relation to sound vibration is what is referred to as cymatics. Cymatics connects sound vibration with geometry and the creation of physical form. This term was coined by Hans Jenny after he expanded on the findings of past scientists who observed the effects of vibration on physical substances and fluids.

As reported in Wikipedia, "In 1967 Hans Jenny, a follower of the anthroposophical doctrine of Rudolf Steiner, published two volumes entitled *Kymatic* (1967 and 1972), in which, repeating Chladni's experiments, he claimed the existence of a subtle power based on the normal, symmetrical images made by sound waves. Jenny put sand, dust and fluids on a metal plate connected to an oscillator which could produce a broad spectrum of frequencies. The sand or other substances were organized into different structures characterized by geometric shapes typical of the frequency of the vibration emitted by the oscillator."

### **The Science Of Sound Healing - Modern Research On Physiological And Psychological Effects Of Sound**

Now that we've explored some of the basics of sound, music, and how these can be used in the healing arts, let's look at what researchers have documented about the results of exposure to sound in a healing context. The Sound Healing Research Foundation has assembled a collection of existing research in the field of sound healing and works to support ongoing and future projects that provide empirical findings on the effects of sound healing. You can learn more about their efforts here: <https://soundhealingcenter.com/shrf>

Topics addressed by projects currently being supported by the Sound Healing Research Foundation include:

- Pain Management
- Autism
- ADD/ADHD
- PTSD Treatment for Veterans (Anger, Grief, Depression, Anxiety and Panic Attacks)
- Drug Rehabilitation
- Sleep Disorders
- Research on the Effect of Consistent Tones – The underlying basis of all Sound Healing is consistency of a vibration, versus chaotic vibrations. All vowels, crystal bowls, tuning forks, and most sound healing instruments create consistent tones that create stability in us physically, mentally, emotionally and Spiritually. From there you can get very detailed as to what frequencies, timbres, musical intervals, musical flows, and energy do to us.
- The Frequencies, Sounds and Musical Flow of Love – Let's get some repeatable science on how to open the heart — also how to use vibration to open to Universal Love.
- Sound Healing, Music and Geometry Curriculum for Public and Private Schools (Kindergarten – High School)

When it comes to the use of sound to treat diseases and disorders, researchers have identified two basic ways in which sound can produce healing or curative effects. Those two processes involve using sound to either break up or dissipate discordant patterns of vibration or to activate and entrain harmonious patterns of vibration. To understand how those approaches work it helps to understand the hierarchy and flow of vibration within our being. As reported by the Sound Healing Research Foundation,

"In [David] Gibson's book, *The Complete Guide to Sound Healing*, David has designed a theory of how vibration works in the body, mind and emotions that is based on empirical evidence and research over the last 20 years. This theory explains a hierarchy of vibration. The hierarchy consists of the following:

Music (Frequencies, timbres, intervals and chords over time)

Intervals and Chords (Many timbres)

Timbres (Many frequencies or harmonics)

Frequency

This hierarchy can be found at every level of reality including not only sound, but also in light, color, geometry and the quantum field. It is also the basis of all Living Systems – including the body and the earth’s ecosystems.

Based on the hierarchy of vibration, frequencies and timbres are components that make up a “flow.” It is like frequencies are the particles that carry the flow of energy through a system. The frequency particles must be vibrating consistently in a coherent fashion in order to receive and transmit a smooth flow of energy. Therefore, at the frequency level, it is all about getting things “humming” consistently or coherent. **Sometimes we breakup discordant or chaotic frequencies; sometimes we entrain or harmonize them back into a coherent, consistent state of vibration.** Regardless, the ultimate goal is always to get back to “smooth flow.” Smooth flow is the essence of health in the body – at every level physically, mentally, emotionally and spiritually.

You can either break up wayward frequencies with “destructive resonance” or resonate them back into their natural harmonic state. Destructive resonance works by finding the natural resonant frequency of something, then turn the volume up until it explodes or disintegrates. This is exactly how ultrasound works on kidney stones and gallstones. They find the frequency of the stones and turn the volume up until it explodes – somewhat similar to exploding a wine glass. There is great YouTube video that shows and explains the science behind how this works in detail.

<https://www.youtube.com/watch?v=BE827gwnnk4>

Anthony Holland has also done research to find the resonant frequency of cancer. In a Ted Talk he shows videos of 4 different types of cancer being exploded with frequencies – another example of “destructive resonance.” Here’s the link to the YouTube video:

[https://youtu.be/1w0\\_kazbb\\_U](https://youtu.be/1w0_kazbb_U)

We can resonate parts of the body back into their natural harmonic state using any consistent vibration. All of the vowels create Coherent Vibrations. Also, all of the common Sound Healing instruments also create Consistent Tones – including crystal bowls, Tibetan bowls, tuning forks, didgeridoos, etc.

According to David Gibson, using music in the healing process can be more powerful than just using one of the elements of the hierarchy of sound that are brought together to create music.

In the research by Anthony Holland, pairs of frequencies in the range between 100 khz to 300 khz that are 11 harmonics apart from one another were used to successfully destroy cancer cells. Anthony's non-profit company Novobiotronics has pioneered oscillating pulsed electric field (OPEF) and plasma emission field treatment (PEFT) to treat cancer and infections. These vibration based approaches are examples of how the energy based paradigm is leading to major shifts in how we treat illness and foster wellness.

Alternative medicine enthusiasts may be familiar with the work of Royal Raymond Rife, who in



the early part of the 20th Century did research using frequencies to destroy cancers and pathogenic organisms in the human body. Rife had the most advanced microscope of his era through which he could observe biological materials and how frequencies affected them. He was highly successful in seemingly curing illnesses using the method of destructive resonance, which he referred to as "mortal oscillatory rate." He found which frequency would stimulate the vibration of a cancer cell, virus, or bacteria, and apply the frequency to make the cell or microbe shatter. Unfortunately, while there was some initial acclaim for Rife in the medical community there were powerful business interests that actively conspired to keep his discoveries from becoming accessible to the public. For those interested in that history there are a variety of books and articles that have been published about the work of Royal Rife. Barry Lynes book *The Cancer Cure That Worked* is one of the most comprehensive accounts of the Royal Rife story. There are also newer instruments that are based upon those principles of using frequencies to either destroy harmful organisms or to stimulate natural healthy frequencies of the body's organs and tissues.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5871151/>

**J Evid Based Complementary Altern Med. 2017 Jul; 22(3): 401–406.**

**Published online 2016 Sep 30. Authors: Tamara L. Goldsby, PhD, Michael E. Goldsby, PhD, Mary McWalters, BA, and Paul J. Mills, PhD**

**Effects of Singing Bowl Sound Meditation on Mood, Tension, and Well-being: An Observational Study.** This study, published in 2017 in the *Journal of Evidence Based Complementary and Alternative Medicine* examined the effects of Tibetan singing bowls meditation on multiple health variables. "This was an observational study designed to examine the potential effects of a singing bowl meditation on mood, tension, anxiety, physical pain, and spiritual well-being. A significant difference was found in all endpoints examined in response to the meditation."

<https://www.britishacademyofsoundtherapy.com/wp-content/uploads/2016/01/ASC-research-article-HealthySound.pdf>

**Sound Affects: Sound Therapy, Altered States of Consciousness and Improved Health and Wellbeing** by Lyz Cooper MA, MSc, FICNM

"A study using a specific method of sound therapy (Himalayan singing bowls, transitioning to Gongs, transitioning to crystal singing bowls, transitioning to therapeutic percussion) was delivered in two ways – by a live soundbath, where subjects lay on the floor and received around 35 minutes of sound, and by a recording of the same which was available online. The focus of this research was to answer the following questions. 1. Is live sound more or less effective than digitally recorded and delivered sound and across what domains? 2. What are the

consciousness altering effects of this method and to what degree are the domains effected? 3. What are the therapeutic benefits of sound induced ASC? Data was analysed by a test known as a Chi Square analysis to gauge significance. Statistically significant, highly significant and extremely significant data was produced in the domains of Physical Relaxation, Imagery, Ineffability, Transcendence of Time and Space, Positive Mood, Insightfulness, Disembodiment and Unity across both live and recorded studies. These findings have far-reaching implications for the use of sound therapy, specifically sound induced altered states of consciousness (ASC) going forward."

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4325896/>

### **The effect of low-frequency sound stimulation on patients with fibromyalgia: A clinical study**

**Lili Naghdi, MD CCFP, Heidi Ahonen, PhD MTA, Pasqualino Macario, DC, and Lee Bartel, PhD**

"The results of the present study suggest that LFSS [Low Frequency Sound Stimulation] may be beneficial in the treatment of FM [Fibromyalgia]. It is important to note that the present study was an open-label investigation, with no group or baseline control. The contribution to quality of life appears to be highly significant and the reduction in medication important. The mechanisms by which the effects were obtained in the present study cannot be definitely identified, but highlight the need for further exploration of the effect of LFSS on muscular and joint mobility through cellular stimulation and the need for brain imaging to determine the effect of LFSS on possible neural dysrhythmias that may underlie FM. Because personal-choice music listening has been shown to have an effect on pain, further research should explore variants of the treatment used including the combination of LFSS with music listening and the use of auditory isochronous 40 Hz sound as an alternative or adjunct to LFSS. Furthermore, it must be noted that the present analysis was a pilot study that had limitations as an open-label study without an initial baseline, with limited follow-up and with no comparison group. However, the results are strong enough to warrant further research and exploration of continued dosing effects."

<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0212021>

### **A parallel randomized controlled trial examining the effects of rhythmic sensory stimulation on fibromyalgia symptoms**

Thenille Braun Janzen, Denise Paneduro, Larry Picard, Allan Gordon, Lee R. Bartel

PLOS One, Published: March 1, 2019

"This double-blind, two-arm parallel randomized controlled trial investigated the effects of gamma-frequency rhythmic sensory stimulation on fibromyalgia. We were interested in whether rhythmic sensory stimulation would promote significant changes in fibromyalgia and associated symptoms, and whether treatment effects would differ between two distinct treatment parameters. Fifty patients with a formal diagnosis of fibromyalgia were randomly

assigned to two test groups. One group received vibrotactile stimulation from a continuous sine wave single-frequency stimulation (40 Hz) for 30 minutes, five days per week, over five weeks, concomitant with usual care. The second group completed the same treatment protocol but received a different stimulation, consisting of random and intermittent complex wave gamma-range vibrotactile stimulation. Fibromyalgia symptoms, pain severity and interference, depression symptoms, quality of life and sleep quality were assessed at baseline and post-intervention. Results indicated that there were statistically significant changes from baseline to post-treatment in measures of fibromyalgia symptom severity, pain interference, depression, and sleep quality. However, treatment outcomes did not differ significantly between groups. These findings provide preliminary evidence that gamma-frequency rhythmic vibroacoustic stimulation may decrease fibromyalgia symptoms and ease associated comorbidities, opening new avenues for further investigation of the effects of rhythmic sensory stimulation on chronic pain conditions."

<https://www.ncbi.nlm.nih.gov/pubmed/30073406>

### **Efficacy of binaural auditory beats in cognition, anxiety, and pain perception: a meta-analysis.**

Garcia-Argibay M, Santed MA, Reales JM. Psychol Research. 2019 Mar;83(2):357-372. doi: 10.1007/s00426-018-1066-8. Epub 2018 Aug 2.

"Binaural auditory beats are a perceptual phenomenon that occurs when presenting separately to each ear two tones that slightly differ in their frequency. It has been suggested that binaural beats can influence cognition and mental states among others. The objective of this meta-analysis was to study the effect of binaural beats on memory, attention, anxiety, and analgesia. Twenty-two studies met our inclusion criteria for this meta-analysis. The results, based on 35 effect sizes, showed an overall medium, significant, consistent effect size ( $g = 0.45$ ). Meta-regression results indicated that it does not seem to be necessary to mask binaural beats with white noise or pink noise in terms of effectiveness, obtaining similar effects with unmasked binaural beats. Moreover, the findings suggest that binaural-beat exposure before, and before and during the task produces superior results than exposure during the task. Time under exposure contributed significantly to the model indicating that longer periods are advisable to ensure maximum effectiveness. Our meta-analysis adds to the growing evidence that binaural-beat exposure is an effective way to affect cognition over and above reducing anxiety levels and the perception of pain without prior training, and that the direction and the magnitude of the effect depends upon the frequency used, time under exposure, and the moment in which the exposure takes place."

[https://www.soundtravels.co.uk/upload/music/Community/pdfs/fabienmaman/cell\\_experiment.pdf](https://www.soundtravels.co.uk/upload/music/Community/pdfs/fabienmaman/cell_experiment.pdf)

**From Star To Cell: A Sound Structure For the 21st Century, by Terres Unsoeld**

**The Role Of Music In the 21st Century, by Fabien Maman**

"In the early '80s, Fabien Maman conducted biology experiments at the University of Jussieu in Paris, showing the impacts of acoustic sound on human cells and their energy fields. Maman found that through a series of acoustic sounds, cancer cells would explode and healthy ones became energized and empowered. Using a Kirlian camera, Maman was able to document what happens to the energy fields of healthy human cells when exposed to acoustic sound. He discovered that the color and shape of each cell and its subtle energy field (Aura) changed according to the pitch and timbre of each musical note."

"Inspired, Maman began to deepen his research into the link between the physical body and energy fields. What prevented cancer cells from vibrating? Was it due to blockages in their energy field? And why did healthy cells vibrate more dramatically with certain frequencies? Was there a recognition of their fundamental note? Is it possible that healthy cells have Consciousness? Is it possible that vibration is the key? Maman's life work is based on the theory that disease begins first to manifest in one's subtle energy field (aura). It is seen as a disturbance partly programmed at birth. As we grow and develop, our energy fields become polluted. Toxins, stress, dissonances in our lives, all impact us. At the same time, our "fundamental-ness" can be accessed through our energy fields. When our energy fields are clear, health and harmony is achieved. We can link with the essence of our Being... our vibrational potentiality. How long we can remain vibrant and clear depends on the level of our Consciousness in the daily life."

"While conducting his biology experiments in Paris, Maman retired from his professional musician's career and became an acupuncturist, linking music with acupuncture. Fabien Maman created the now famous system which uses tuning forks instead of needles on acupuncture command points. His research started with the ancient classical acupuncture texts which vaguely referenced 5 notes for the 5 Elements of Nature: Wood (A), Fire (C), Earth (F), Metal (G), and Water (D). He went to China several times looking for people who used these notes. He found none. He spent years of research corroborating that these 5 notes indeed resonated with the energetic qualities of the elements and the Seasons. These 5 notes of the elements led Maman to create the twelve notes of the acupuncture meridians which correspond to the twelve organs of the body. Maman created the now famous system which uses tuning forks instead of needles on acupuncture command points. Based on Japanese needle technique, tuning forks work to pull the yang energy to the surface. The fork works faster than a needle because the vibration of sound travels faster than the vibration of the needle. The tail of the fork gives a vibrational message to the acupuncture point itself and then to the meridian and the organ. At the same time, the fork of the tuning fork sends a vibrational message into the subtle energy fields, opening the way for potentials to be revealed, as well as dissolving any crystallizations of negative energy."

<https://www.sciencedirect.com/science/article/pii/S1877042813016893>

**Sound Therapy: An Experimental Study with Autistic Children**

**Mahya AbediKoupaeia, Kambiz Poushanehb, Ali Zade Mohammadic, Najmeh Siampour M.A**

**Procedia - Social and Behavioral Sciences, Volume 84, 9 July 2013, Pages 626-630**

"Abstract

Objective

The effect of the Tomatis sound therapy method on the reduction of autistic symptoms in children with autism was studied.

Method

34 autistic children (aged 4-8 years) were selected from a rehabilitation centre in Tehran and then assigned randomly to two equal-sized experimental and control groups. The experimental group received sound therapy for 30 sessions of 120 minutes. The GARS was administered as the pre- and post-test, before and after the treatment. Meanwhile, the sound therapy profile was used as a basic tool for the remediation plan.

Results

ANCOVA analysis showed that there were significant differences among mean scores of autistic symptoms in the 2 groups.

Conclusion

this research showed that the Tomatis method can reduce autistic symptoms, increase social interaction, communication, and reduce stereotypical movements, and can be used as an effective treatment for autistic children."

<https://clinical-epigenetics.imedpub.com/application-of-sound-frequencies-as-anepigenetic-tool-in-reversing-the-limitingsymptoms-of-autism.php?aid=18271>

**Application of Sound Frequencies as an Epigenetic Tool in Reversing the Limiting Symptoms of Autism**

**Rajalakshmi Kandaswamy**

Autism Expert, Founder-Authentic Autism Solutions™, Chennai, India

Journal Of Clinical Epigenetics

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"Good Science is Any "Scientific Discovery" or any Tool has a practical Application that actually changes and transforms people's lives for the better. Applied Intentional Epigenetics in the form of using Intention and Sound is one such example of using the human voice and human Energy

fields as the Epigenetic Tool of transformation in Autism. Thus helping autistic beings gain freedom from their limiting symptoms and communicate with ease. And helping their parents and caregivers communicate in their language and be understood with ease and joy. Intent Healing(TM) is the epigenetic tool that is bridging this "Communication gap" between the autistic children/beings and their caregivers and offers a Practical, experiential understanding of How the human sound and energy frequencies can be applied from the aligned state of being that can manifest the results of the autistic child thriving, free from the limiting symptoms."

<http://isybeeautism.com/autism-treatments/music-sound-therapy-treatment-for-autism/>

### **Music and Sound Therapy as a Treatment for Autism**

"Michael Merzenich conducted many experiments and research in Neuro-Plasticity or Brain Plasticity. This is a science of how the brain can adapt to stimuli and repair itself after damage, by re-mapping certain functions to other parts of the brain, normally used or reserved for other specific mappings.

In 1996 Merzenich teamed up with other researchers and psychologists and formed a company named Scientific Learning which is wholly devoted to Neuro-Plastic research. The company developed a program named Fast ForWord which had remarkable results in aiding children with speech and language difficulties. This then led Merzenich to deepen his understanding of Autism (ASD) and Pervasive Development Disorders (PDD).

Merzenich's work on the "critical development period" and BDNF (brain derived neurotrophic factor) helped him develop a theory that explains how so many different problems the ASD children are affected by could be part of a single autistic whole.

When we perform an activity that requires specific neurons to fire together, they release BDNF. This consolidates the connections between the neurons and helps to wire them together as well as turning off or closing down the critical period once the it has strengthened the key connections.

Merzenich argues that in children that are genetically predisposed to Autism some situations overexcite the neurons leading to massive premature release of BDNF, so instead of important connections being reinforced, all connections are. So much BDNF is released that it turns off the critical period prematurely, sealing all the connections in place, and the child is left with scores of undifferentiated brain maps and hence pervasive development disorders.

Their brains are hyper-excitabile and hypersensitive, if they hear one frequency the whole auditory cortex starts firing. This also explains why most children with Autism also have epilepsy and that strobe lights, which are pulsed multifrequency light, can trigger an epileptic fit.

Autistic children process sound in an abnormal way

Recent brain scan studies now confirm that Autistic children do indeed process sound in an

abnormal way and that the undifferentiated cortex plays an important role in difficulty paying attention and learning.

Using rats for their research they found that by using white noise they de-differentiated the auditory maps and simulated an autistic condition, they then normalised and re-differentiated the auditory maps using very simple tones, one at a time.

Sounds and music re-train brain circuits of Autistic children

This is the theory behind using sounds and music to re-train or re-map the brain circuits of a child with Autism or Pervasive Development Disorders. This research also led Merzenich to improve the program Fast ForWord to also help children with Autism."

<http://www.hrpub.org/download/20180730/IJRH2-19290514.pdf>

### **A Study to Explore the Effects of Sound Vibrations on Consciousness, by Meera Raghu**

International Journal of Social Work and Human Services Practice, Vol.6. No.3 July, 2018, pp. 75-88. Horizon Research Publishing.

Studies by Hans Jenny (and followed by other scientists) show that when playing a toning sweep through a range of frequencies, there is a moment when chaos ensues when changing to another tone. He found that the chaos occurs when matter of any kind is rearranging itself into a new form based on the new frequency. Matter is designed to move away from chaos and into form and vice versa, a never-ending cycle that occurs on all levels continuously from our cells to our universe. This can be seen in patterns 3 (E-Ga), 4 (Pa-G) and 5 (Da-A), where the pattern for 4 (Pa-G) appears with less symmetry than those for 3 (E-Ga) and 5 (Da-A). Hans Jenny through his study of cymatics also developed a theory that molecules inside each cell of our body can be positively affected by sound vibration. (Linton, R., 2008). **Conclusions.** Clear geometric patterns were observed when the vibrations were harmonious and pleasant. When using the voice as source (for the same pitch), it showed that the patterns were similar to those observed for the lower octaves using the signal generator as source.

<https://www.apa.org/monitor/2013/11/music>

**Music as medicine: Researchers are exploring how music therapy can improve health outcomes among a variety of patient populations, including premature infants and people with depression and Parkinson's disease.** By Amy Novotney. American Psychological Association, November 2013, Vol 44, No. 10

"In 2009, researchers led by Lauren K. King of the Sun Life Financial Movement Disorders Research and Rehabilitation Centre at Wilfrid Laurier University, in Waterloo, Ontario, found that short-term use of vibroacoustic therapy with Parkinson's disease patients led to improvements in symptoms, including less rigidity and better walking speed with bigger steps and reduced tremors (NeuroRehabilitation, December, 2009). In that study, the scientists

exposed 40 Parkinson's disease patients to low-frequency 30-hertz vibration for one minute, followed by a one-minute break. They then alternated the two for a total of 10 minutes. The researchers are now planning a long-term study of the use of vibroacoustic therapy with Parkinson's patients, as part of a new partnership with the University of Toronto's Music and Health Research Collaboratory, which brings together scientists from around the world who are studying music's effect on health."

[https://www.cell.com/cell/fulltext/S0092-8674\(19\)30163-1](https://www.cell.com/cell/fulltext/S0092-8674(19)30163-1)

**Multi-sensory Gamma Stimulation Ameliorates Alzheimer's-Associated Pathology and Improves Cognition.** Cell, Volume 177, ISSUE 2, P256-271.e22, April 04, 2019. Anthony J. Martorell, Abigail L. Paulson, Ho-Jun Suk, Fatema Abdurrob, Gabrielle T. Drummond, Webster Guan, Jennie Z. Young, David Nam-Woo Kim, Oleg Kritskiy, Scarlett J. Barker, Vamsi Mangena, Stephanie M. Prince, Emery N. Brown, Kwanghun Chung, Edward S. Boyden, Annabelle C. Singer, Li-Huei Tsai.

"We previously reported that inducing gamma oscillations with a non-invasive light flicker (gamma entrainment using sensory stimulus or GENUS) impacted pathology in the visual cortex of Alzheimer's disease mouse models. Here, we designed auditory tone stimulation that drove gamma frequency neural activity in auditory cortex (AC) and hippocampal CA1. Seven days of auditory GENUS improved spatial and recognition memory and reduced amyloid in AC and hippocampus of 5XFAD mice. Changes in activation responses were evident in microglia, astrocytes, and vasculature. Auditory GENUS also reduced phosphorylated tau in the P301S tauopathy model. Furthermore, combined auditory and visual GENUS, but not either alone, produced microglial-clustering responses, and decreased amyloid in medial prefrontal cortex. Whole brain analysis using SHIELD revealed widespread reduction of amyloid plaques throughout neocortex after multi-sensory GENUS. Thus, GENUS can be achieved through multiple sensory modalities with wide-ranging effects across multiple brain areas to improve cognitive function. "

## **Past, Present, And Future Uses Of Sound Healing - Exploring Sound Healing In Human Society**

### **Edgar Cayce**

Edgar Cayce, dubbed the "sleeping prophet" was a renowned spiritual medium who would go into a trance state and relay information for the person receiving a reading. His session transcripts were kept and the accuracy of much of the information he provided was verified. The Association for Research and Enlightenment (A.R.E.) has promoted ongoing research into his life and spiritual readings and the spiritual guidance and healing wisdom they provide. His sessions focused a great deal on healing, and he would often be directed to give information to people about health concerns and methods of treating or curing their ailments. The information included a wide range of remedies that included naturopathic, homeopathic, allopathic, and



other resources, many of which were unknown to the ordinary personality or conscious mind of Edgar Cayce.

"Know that all healing forces are within, not without! The applications from without are merely to create within a coordinating mental and spiritual force." - Edgar Cayce

"Sound will be the medicine of the future." - Edgar Cayce

### **Nada Yoga**

In the yogic traditions from the East the practice of using sound for spiritual development and personal healing is referred to as nada yoga, the yoga of sound. Chants and mantras are part of this tradition, and it is recognized that sound vibration using the voice or other instruments can help shift one's state of consciousness and facilitate meditative states.

### **Michael Tellinger**

Michael Tellinger, a native of South Africa, is an author and researcher who has explored the massive amount of ancient stone circle formations in Southern Africa and hypothesized about the use of those stones to generate energy and foster healing. Those stones contain quartz, the same mineral compound found in modern day crystal singing bowls. Here is what Tellinger has reported about his findings as he has investigated those man-made stone formations:

#### **"REPORTS OF HEALING**

Since 2010, many of the visitors have reported that they experienced healing in some way after their visit to the ruins. I have been told countless tales of what the people experienced and what healing they observed. A truly diverse list of health problems that were either alleviated to a certain extent, or even cured completely. From breathing, skin problems, headaches, muscular pain, back ache, blood pressure, anxiety, stress, and more.

But the most mind-blowing confirmation came from a friend in the USA – who attended more than one Sacred Sites Tour with me, who told me in confidence that she was totally cured from an advanced stage of cancer. She told me that I saved her life, because she arrived in South Africa thinking that it may be her last trip. Upon returning to the USA her cancer had retreated completely. She claims that it was a combination of the intense ENERGY of the ruins and Adam's Calendar that caused her healing.

#### **RESEARCH**

In January 2018, I held my first Research Expedition, during which we discovered the spectacular fossils. BUT, we also did an ongoing series of vital body function measurements over a period of one full month. Taking readings before and after exposure to the ruins and Adam's Calendar. Blood pressure; temperature; heart rate;

blood flow; retinal response; and several other measurements.

The results were astounding. There is no doubt that exposure to the stone circles have a positive effect on the bodily functions which we measured over a 30-day period.

Is it possible that the Stone Circles and Adam's Calendar can be used for HEALING? And should we contemplate introducing deeper spiritual, meditation, healing & wellness journeys to the ruins?

I began to wonder how this unexpected phenomenon could be explained scientifically – so that everyone can truly grasp it and fully resonate with it. The key word here is RESONATE.

#### HOW THE STONE CIRCLES HEAL

From conducting many electronic measurements, we know that the stone circles are powerful energy generating devices. Each circle is a Cymatic pattern that represents the subtle Earth frequencies that rise from the surface at that point. The stone walls simply amplify the frequencies through the concentrated quartz/silica content, and create moving amplified sound frequencies and magnetic anomalies, that in turn create electro-magnetic fields emanating from the stone walls.

The ancient architects were very smart – they knew how to take the constant flow of subtle sound frequencies from the surface of the Earth – how to amplify it – and turn it into usable energy for all kinds of needs they may have had at the time.

<https://michaeltellinger.com/the-healing-effects-of-the-stone-circles-of-south-africa/>

#### **Pythagoras**

Pythagoras was a Greek philosopher and mathematician who was a student of esoteric knowledge and who had a strong interest in music and sound. Our modern music scales and tuning system have their roots in the work of Pythagoras. Pythagoras is known for his discussion of the "music of the spheres" and the relationship between math, sound, music, and the cosmos.

#### **Jonathan Goldman**

Jonathan is a musician who shifted his path from popular music creation to the use of music and sound for healing. Jonathan Goldman has produced many acclaimed albums of music designed for use in the healing arts and is the founder of the Sound Healers Association. He has presented the concepts that frequency plus intention equals healing and visualization plus vocalization equals manifestation. [www.soundhealersassociation.org](http://www.soundhealersassociation.org)

#### **Mitchell Gaynor, M.D.**

Dr. Mitch Gaynor was a medical doctor in New York specializing in oncology (cancer care) who explored holistic medicine and became a prominent advocate for using sound vibration as a complementary healing modality to assist cancer patients.

### **Sharry Edwards**

As reported by Jill Mattson, who is a sound healer and author:

"Sharry Edward's life and work reveal that special nano frequencies can be detected within our voices and emanating from our bodies. These minute sounds give clues to our physical and mental states of being. It is widely believed these sounds indicate whether the body's subtle-energy forces are in proper balance or out-of-harmony. Sharry discovered that by carefully applying the appropriate frequencies, harmony is restored to the subtle-energy systems; the corresponding optimum spiritual and mental states are also created to empower healing and growth.

Edwards innately recognized that specific sounds correlated to certain physical problems. She was born blessed with an extraordinary sense of hearing which was greatly enhanced after a near death experience. This remarkable sense of hearing was responsible for Sharry's first encounters with the enormous potential of sound. She first experimented creating harmonizing tones with her voice to alleviate the discordant sounds she perceived. She developed the ability to produce extraordinary sine wave sound frequencies with her voice alone. Contrast Sharry's ability with a person who is deaf from birth.

A deaf person cannot naturally develop the ability to speak—Sharry learned to use her voice in superhuman ways, guided by her remarkable sense of hearing. Analogously, dolphins can receive (and transmit) sound frequencies about 10 times greater than the range of the normal human ear. This ultrasonic ability gives the dolphin critical information about the complex world around them. They also have the ability to communicate advanced information at great distances.

In vastly diverse examples Sharry was able to help people suffering from glaucoma, emphysema and traumatic muscular-skeleton injuries. She gave these people sound generators, which were designed to produce frequencies tailored to their afflictions. After regularly listening to the sound generators, these people showed remarkable improvement in their respective abilities to see and breathe; tissue and bone were regenerated restoring the ability to walk and function normally. I have personally experienced the wondrous ability of sound to empower the body to heal itself. I have long suffered from shingles. In my case the viral outbreak occurs around my mouth and lips. This is extremely painful as you can imagine. For years I suffered for 4 or 5 weeks at a time with each shingles attack. With Sharry's guidance, I listened to specific frequencies aimed at strengthening my body's subtle-energy fields and fighting the shingles virus - the results have been amazing. Today when I feel the onset of a shingles

attack I listen to the tones and my symptoms abate in a day or two—as compared to previously enduring a month or more of misery."

<https://www.edgarcaycenyc.org/ancient-sounds-modern-healing-new-insights-from-new-masters>

## **ET And Atlantean Sound Healing**

I have personally met individuals who have had unusual encounters with extraterrestrial craft or beings, and in a couple instances those individuals described those beings using advanced sound or light based technology for healing. If you read personal accounts of the many people who report encounters with beings who seem to be from beyond the Earth, it is not unusual to find descriptions of miraculous healings that involve sound or other forms of vibration.

It seems quite likely that the advanced ET methods of using vibration were present in some of Earth's ancient civilizations. In one of the many past life regression sessions I facilitate my client described the following as she recalled and relived her experience in another incarnation as a member of an ET race that visited and colonized Earth and used sound, light, and crystals for power generation and healing.

"I had long hair, very tall, I have a long robe. I saw a female coming towards me, she's my assistant. I was in charge of the temple. It's for healing. I'm inside the temple, it feels peaceful. There are different chambers, each one has its own function, light comes in from the top, the dome, there's a gigantic crystal in the center, it's radiant, it's a raw piece of crystal, bluish, like turquoise, it's beaming light coming inside, it powers everything around it like a generator. I was chanting something, it's a sound that resonates with the crystal. I was wearing a purple robe. The crystal is turquoise, greenish, I had the same greenish eye color, it resonated with me. I see a lot of symbols, it's a language I don't know. I step throughout the chambers, the floor is black. The silence has this power, it has a sound. It's a grid, the crystals are making sound. There's a person being healed, this crystal is laying on the person, around him. The crystal in the middle of the temple is suspended in the air, glowing, I feel the heat, the energy surrounding me. I have light coming from my hands. I have a very large skull, whitish hair, like silver. The symbols appear in my mind, sent by the crystal, it's how it communicates with me. Geometries. I'm still talking to the crystal. I want to find it - the crystal wants me to find it, it's waiting for me, it penetrates my heart. I was exceptionally tall, taller than anyone else, than most people, like a different race. From a distant galaxy. I had an elongated skull. I'm so tall, like a god or deity you worship, one of those statues, I am that statue. My name is like a symbol, a fountain.

The unicorns are true, they are real. It has a golden horn, it belongs to me, I have my own unicorn. The ocean... there's more of us... I don't understand why I'm so much taller but I see my own kind. They are also worshipped, they come from the same place. I don't know why we come here. I miss home, I was sent here to do something, they

followed me here. I am the prince, my father sent me here, to gain experience, to witness, be part of the cycle, to harvest. The trees are alive, I can talk to them. I am as tall as the trees. I see a female of my size and race. We came here together, she knows how to use the plants, the herbs. It's like a green house. There's floating water, nurtured by crystals. She's always been here with me, she followed me here, she's part of my team. She is beautiful.

I think I made some mistakes, I didn't love the original people here. I didn't feel the connection, I did not connect with the species. I only loved nature, I didn't love the people. I did not respect the natural state of the species. I experimented on them. I didn't have compassion for them. I need to understand everything is part of the one plan. Everything is perfect as it is. I need to respect the natural progression of consciousness, of the species, it has its own cycle to go through, it shouldn't be accelerated or manipulated. I'm here now to bring light back to the planet. Allow the local species to progress on its own, naturally. They're all human beings that experience a state of consciousness just as it is. All life is beautiful, is divine. I wanted to experience to live like them so I could understand. I want to experience the need for food, I didn't need food, my race was nourished by light. We communicated telepathically, we didn't have language, we chanted tones, like music, symbols, also a code to activate crystals, also stringed instruments. I'm here to learn compassion. That was my test, I wasn't told.

I see dolphins, I can communicate with them, they came to the planet first before anyone else, it was all ocean. Music, sound, it's the universal language, it's one of my talents, each tone has an image, a shape, a color. I know how to use it. When I play a sound then colors, shapes pop out, it has impact on the living beings. That's how I use the crystals, the sound produced by the crystals. The tone activates the crystals so they emit light and resonate. They've always been with me. We stand in a circle, the continent is shaking, it's all there, it is still there. I'm drawn here to be close to them, everytime I am in the ocean I can feel their presence, it will reveal itself to me. It all became water with me. They will find me again. We will redevelop what was sunk, what was lost."

### **Quotes On Sound, Music, And Healing**

"Life is a song. It has its own rhythm of harmony. It is a symphony of all things which exist in major and minor keys of Polarity. It blends the discords, by opposites, into harmony which unites the whole into a grand symphony of life. To learn through experience in this life, to appreciate the symphony and lessons of life and to blend with the whole, is the object of our being here." - Dr. Randolph Stone

"Man's music is seen as a means of restoring the soul, as well as confused and discordant bodily afflictions, to the harmonic proportions that it shares with the world soul of the cosmos." - Plato

"Each celestial body, in fact each and every atom, produces a particular sound on account of its

movement, its rhythm or vibration. All these sounds and vibrations form a universal harmony in which each element, while having its own function and character, contributes to the whole." - Pythagoras

"Harmony sinks deep into the recesses of the soul and takes its strongest hold there, bringing grace also to the body & mind as well. Music is a moral law. It gives a soul to the universe, wings to the mind, flight to the imagination, a charm to sadness, and life to everything. It is the essence of order" - Plato

"The magic of "Musical Medicine" will come into its own. The application of such healing potencies will not be limited just to man's body and mind. It will be an agency for building and healing his soul as well." - Corinne Heline

"Music can minister to minds diseased, pluck from the memory a rooted sorrow, raze out the written troubles of the brain, and with its sweet oblivious antidote, cleanse the full bosom of all perilous stuff that weighs upon the heart." - William Shakespeare

"Love is the keynote, Joy is the music, Knowledge is the performer, the Infinite All is the composer and audience." - Sri Aurobindo

"As the attuning of music arouses emotions in the body to an unusual degree, well that there be choices made regarding what emotions are aroused and what character of music." - Edgar Cayce

"In ancient times music was the foundation of all the sciences. Education was begun with music with the persuasion that nothing could be expected of a man who was ignorant of music." - Cicero

"At a certain stage of our progressive attainment, every Initiate undergoes an "Illumination by Sound" in which the Music of the Spheres becomes to us a living reality. When the magical powers of sound are rediscovered and scientifically directed to the specific purpose of healing... and when man has learned how to release the mantric powers embodied in such inspired utterances, he will master the energies transcending even those unleashed by the atomic physicist of today. They will be energies of yet another and higher dimension." - Corinne Heline

"It has been found that musical vibrations make their impact upon the entire body, being picked up by the nerves, spinal column, and even by the bones. This is why people who are deaf can react to music. It has also been demonstrated that music affects the pulse, respiration, and blood pressure; but its deepest effects, and those from which most of its curative properties are derived, are mental and emotional." - Doren Antrim

"The human body is made up of electronic vibrations, with each atom and elements of the body, each organ and organism, having its electronic unit of vibration necessary for the sustenance of, and equilibrium in that particular organism. Each unit, then, being a cell or a unit of life in itself has the capacity of reproducing itself by the first the law as is known as reproduction-division. When a force in any organ or element of the body becomes deficient in its ability to reproduce

that equilibrium necessary for the sustenance of physical existence and its reproduction, that portion becomes deficient in electronic energy. This may come by injury or disease, received by external forces. It may come from internal forces through lack of eliminations produced in the system or by other agencies to meet its requirements in the body." - Edgar Cayce

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