

# Therapeutic Use of Music

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In a study done at St. Agnes Hospital in Baltimore, patients in critical care units listened to classical music. They found that half an hour of music produced the same effect as 10 mg of Valium. This study proved that music can be as powerful as a drug to help calm individuals who are very stressed. It changed many medical professionals' opinions about the value of music.

People have stereotypical ideas when they hear the words “music therapy.” One is “rhythm bands and sing-a-longs” and another is “background music.” People tend to think, “Yeah, I know. Put on some background music and it calms you down.” I have been a music therapist since 1977 and I promote and create “music with a purpose.” There is a difference between recreational music and therapeutic music, even though recreational music can be therapeutic.

Dr. Oliver Sacks, a neurologist who wrote the book “Awakenings” has said, “The power of music to integrate and cure is quite fundamental. It is the profoundest non-chemical medication.”

## Whatever you concentrate on, you become.

Our minds easily become absorbed in sound. We all, even infants and animals, enjoy listening to music. When the mind is fully concentrating on anything, there can arise a feeling of inner bliss.

Even plants are affected by music. Sunflowers are known to follow the sun's rays. When loud rock music was played around sunflowers, they turned away. Soft music did not disturb the flowers' natural inclination to look to the sun. Imagine then what sounds could do to us as humans.

High frequency sounds energize the brain. Low frequency sounds drain energy away. To give you an example: Humming sounds of electrical appliances, computers and printers cause

a tiring, irritating effect. Any machine sound, even if it is subtle, has a tiring effect on the body. Watching television for several hours can make you feel really exhausted. Part of the cause is the low-frequency hum.

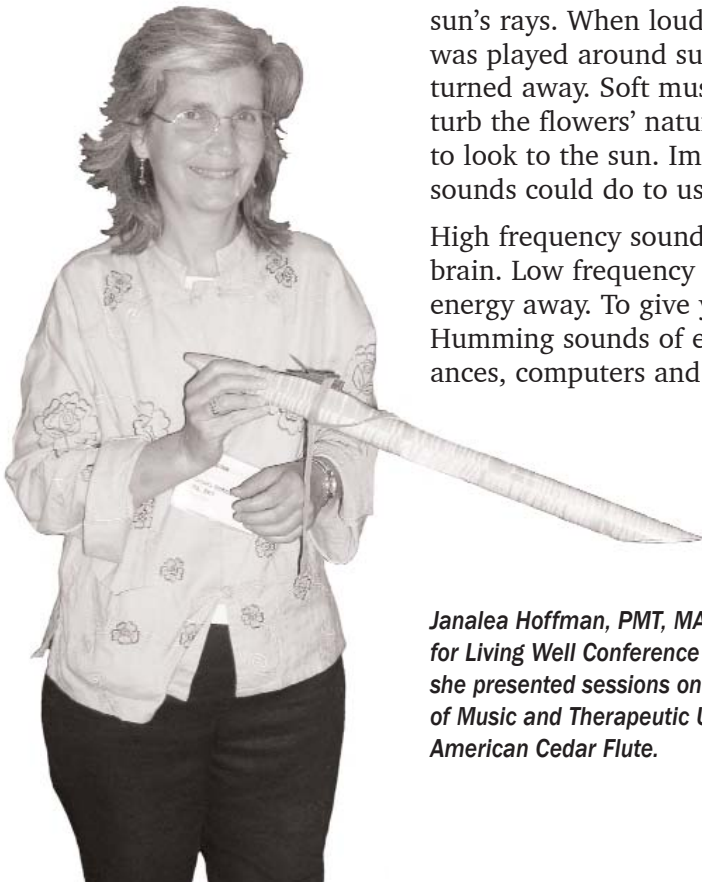
It is very important to be cognizant of your sound environment, because it really does affect your body. You need to feed your ears the proper sounds, just like your brain needs proper oxygen and nutrition.

## The rhythm of music and the phenomenon called entrainment.

There is a lot of debate about what it is about music that is healing. One of my interests has been rhythm because of the natural phenomenon of entrainment. A Dutch scientist Huygens was also a clockmaker and had a room full of grandfather clocks. He noticed that when two clocks with pendulums were very close to each other, they synchronized, and he called this *entrainment*.

Humans are always entraining or synchronizing with each other, sometimes in real positive ways and, sometimes, in not quite as positive ways.

*Janalea Hoffman, PMT, MA, at PHI's Strategies for Living Well Conference in June 2005, where she presented sessions on Therapeutic Use of Music and Therapeutic Uses of the Native American Cedar Flute.*



If you are sitting next to somebody who is really agitated, you might find yourself becoming agitated. Or, if you are a little agitated and someone beside you is very, very calm, you might entrain with the calm rhythm.

### **When we hear something, it is not just through the ears.**

Most people have heard about an opera singer who can sing a high note and break glass. That is an example of sound energy moving matter. One experiment used vats of thick liquid that were absolutely smooth on the top. With sound vibrations, the liquid moved, creating patterns. The patterns for the base notes looked like water waves and when the higher pitches occurred, the patterns looked like little drips of water dancing above the lower water waves.

Experiments such as this prove that sound touches matter. When you hear something, it is not just through the ears. It literally touches your body, so it is important to pay attention to the music and sounds in your world, because they have an effect on the immune system and brain.

Music has a unique ability to quickly change our mood from one to another. When I hear the hymn “In the Garden,” I’m instantly taken back 40 years to my grandmother’s funeral.

### **Music with a purpose.**

People say to me, “There is so much music out there. How do you find healing music?”

When I first started this work, I used a lot of classical music until I realized the great masters did not write music for relaxation. Bach, Beethoven and

Brahms were writing for the court and for the emotional side. They weren’t thinking, “I need to relax somebody.”

A piece by Rachmaninoff has been used in two research studies. In one study, people who heard the music said, “It relaxed me and it soothed me.” But, they were also hooked up to monitors checking heart rates and blood pressure which went up. The researchers scratched their heads, saying, “What’s happening here? People are saying they are relaxed, but their heart rates and blood pressures went up. Their minds are giving one answer and their bodies another.”

The reason for this discrepancy has to do with entrainment. The classical music made them feel good emotionally but the rhythm of the music was unpredictable and up and down. Their bodies could not entrain with the music. The emotional response to music is different than the physiological response.

If you want to do something to feel emotional, to bring up imagery or to feel inspiration, listen to classical music. If you want to do something more on a physiological level, you should use music with slower rhythms.

This is one of the reasons I have experimented with writing my own music for therapeutic purposes—music with a purpose.

For example, I created a CD called “Musical Acupuncture” which is music at exactly 50 beats per minute. The listener imagines the tones coming into their body, similar to needles with acupuncture. The sound has the ability to energize the body. ▲

**Musical acupuncture is a way of interacting with the music and doing something proactive with pain or discomfort. In so many cases the only solution for pain is pharmaceutical, but musical solutions are pleasant and have no side effects.**