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## Effects of Humming on the Human Body

This paper will be on the effects humming has on the human body. The simple act of humming comes with so many benefits behind it. Most of us know that humming is a very self-soothing sound but it affects us on a physical level, reducing stress, inducing calmness, and enhancing sleep as well as lowering heart rate and blood pressure and producing neurochemicals such as oxytocin. Many don't think much of it and hum as they please, but what they don't know is that the sound that is produced comes from the paranasal sinuses. Humming vibrates the cells in muscles and organs and those vibrations act as an internal massage. It activates the parasympathetic system, bringing peace to the mind and helps ease off all the stress and tiredness of the day, automatically placing the body in a relaxed state.

Research shows that vibrations produced due to sound energy are directly involved in the stimulation of the thymus. The thymus is a small gland that is responsible for the maturation of T-lymphocytes. This gland usually involutes in size as the person ages, decreasing the production of T-lymphocytes. This can lead to many diseases taking over the body, including cancer.

With all the added benefits that come with humming, something I have recently found out that really piqued my interest was how humming raises nitric oxide levels. It has some of the most profound effects on the body that can be felt both internally and externally. The air that travels up there, ends up producing nitric oxide in return and is carried into the lungs during nasal breathing which in turn helps improve oxygen circulation in the body. In addition, NO has an antifungal, antiviral and antibacterial, thus anti-inflammatory function, which makes this

exercise a supplementary remedy in the treatment of diseases caused by inflammation in lung tissue.

Humming causes the air to oscillate (move or swing back and forth at a regular speed) which then greatly speeds up the exchange of air between the sinuses and the nasal cavity. Pulsating air flow created by humming, causes a dramatic increase in gas exchange between these cavities. It is said that humming leads to a 15 to 20-fold increase in NO levels helping to open up airways and kill pathogens than when individuals simply breathe deeply/silent exhalation. Researchers have discovered that daily humming exercises create vibration in the sinus and nasal cavities, which will increase blood flow there, air circulation and the production of nitric oxide, thus inhibiting bacteria, viruses and infections to grow.

A simple humming exercise you can do if you feel you are coming down with a respiratory infection, sinusitis, or are unwell. You can do it any time as a preventative measure to help boost immunity. We associate humming with cheerfulness and you'll notice that it's difficult to hum and feel down at the same time.

1. Breathe in through your nose with your mouth closed and the tip of your tongue resting behind your top front teeth. (If you can't breathe through your nose, do a nose unblocking exercise first).
2. As you exhale slowly through your nose, make a sustained "hmmmmmm..." sound.
3. Avoid pushing the air out with force. As with everything to do with breathing, this should be done gently.
4. Now, breathe in gently through your nose and repeat.

5. The sinuses are air filled cavities located around your nose, temples and above your eye sockets. To increase the effect of the exercise you can gently massage those areas while doing the exercise.
6. If you have a stubborn blocked nose or sinusitis repeat this exercise for 5 to minutes, two to four times a day for a few days or until symptoms improve.

When doing this exercise the vibrations you might feel are helping increase air circulation and production of NO in your nasal and sinus cavities.