



ELITE
Personal Training and Fitness Solutions

HEALTH TOPIC OF THE WEEK

9/11 - Nitric Oxide and Humming

Introduction

Humming might seem bizarre or even silly for a health topic. It's not. This week we will discuss the enormous importance of nitric oxide (NO) and how humming increases its production.

What is nitric oxide (NO)?

Nitric oxide is a molecule that is key in dilating blood vessels and improving blood flow. It is also known to improve lung function and increase breath control. Studies have shown that humming can significantly increase the production of nitric oxide in the nasal cavity.

How Important Is Nitric Oxide (NO)?

Nitric oxide is so important that in 1992 Science magazine named it the Molecule of the Year. In 1998, the Nobel Prize in Physiology and Medicine was awarded to three scientists who discovered its dramatic effects on cardiovascular health.

Nitric oxide is one of the most important molecules that your body produces naturally. It's vital because it affects such a wide range of essential processes. Its primary function is vasodilation. This means it helps the inner muscles of your blood vessels to relax and widen, thus enabling your blood to move freely, delivering oxygen and nutrients to your whole body more efficiently.



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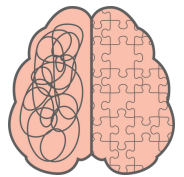
Elite Personal Training and Fitness Solutions does not provide medical treatment or intervention. We acknowledge scientific evidence that appropriately intensive exercise and sustainable nutritional intervention can have significant impact on chronic health disorders and obesity, dramatically improving symptoms when recommendations are followed. Please visit us at Eliteptf.com for more information and to schedule your evaluation.

Nitric oxide and aging



- As you age (starting around age 40), the body naturally begins to produce less nitric oxide. The nitric oxide you produced in your twenties could be lowered by half or more in your 50s, 60s, and beyond.
- If you can't produce enough nitric oxide, you have an increased risk of serious health conditions, such as heart problems, diabetes, and erectile dysfunction.
- Nitric oxide is associated with healthy brain function. It acts as a neurotransmitter, potentially impacting learning and memory function.
- Some studies suggest nitric oxide can also help with age-related brain deterioration.

Extensive research



Over 160,000 scientific articles have been published about various aspects of nitric oxide. Research shows:

- Better blood flow and more efficient delivery of oxygen and other nutrients to muscles and tissues.
- Increased NO levels have similar benefits to blood pressure medications.
- Greater energy, improved athletic performance, and faster recovery.

**Humming
for
Health**

Nitric oxide and humming

- Nitric oxide is produced in the paranasal sinuses, a group of four air-filled spaces that surround the nasal cavity. In other words, most NO is produced in the mouth and nose.
- Impaired breathing leads to poor air circulation and lower levels of beneficial NO in the nose and sinuses, thus creating an environment beneficial for bacterial growth and inflammation.
- Studies carried out at the Karolinska Institute in Sweden show that increased humming leads to a 15 to 20-fold increase in NO levels, helping to open airways and kill pathogens!



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How humming helps

According to *The Humming Effect* by Jonathan and Andi Goldman, humming reduces stress, induces calmness, enhances sleep, lowers heart rate and blood pressure, produces neurochemicals such as oxytocin, increases lymphatic circulation and melatonin production, releases endorphins and creates new neural pathways in the brain. All help reduce stress and promote health and well-being.

Humming Exercise

Here is a simple humming exercise you can do if you feel unwell or suspect that you are coming down with sinusitis or a respiratory infection. You can also do it any time as a preventative measure to help boost immunity.

Humming is associated with cheerfulness. Try it. You'll notice that it's difficult to hum and feel down at the same time!

1. Breathe through your nose with mouth closed and the tip of your tongue resting behind your top front teeth. (Note: if you can't breathe through your nose do the 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, do it 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, gently massage those areas while doing the exercise.
6. If you have a stubborn blocked nose or sinusitis, repeat this exercise for 5 to 10 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.



EPT Pro Tips

- It's easy to improve NO production by doing the humming exercise suggested above.
- Humming prior to sexual activity immediately improves blood flow and is helpful for those who struggle with ED.
- Don't use mouthwash. It blocks the pathways in the mouth that produce NO.
- Besides humming, there are certain foods and beverages that are rich in dietary nitrate. For more info, please reach out to EPT. We are all certified functional nutritionists and can help you select foods to improve your nitric oxide level.



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