## Secret military technology reverses hearing loss

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The U.S. military is worried about the hearing loss of its soldiers...

Every day during basic training, our men and women in uniform fire hundreds of rounds of ammunition per minute. The noise from their M-16 assault rifles is deafening.

More than half of all U.S. soldiers experience moderate to severe damage to their ears by the time they leave the service.

In fact, hearing loss is the No. 1 disability our soldiers face.

So researchers at the Marine Corps Base at Camp Pendleton recruited 1,000 marines going through rifle training. All were given a standard hearing test.

Then researchers gave 566 marines a powerful amino acid three times a day for a month. The other marines took a placebo.

A second hearing test after the study's conclusion found that 70% of the soldiers who took the amino acid had dramatically less hearing loss.<sup>1</sup>

The powerful secret weapon the soldiers were given was an amino acid called **N-acetyl-cysteine** (NAC).

The researchers found that NAC protected the tiny ear hairs in the soldiers' ears. They had less damage and also less ringing in their ears.

NAC is so effective our military now uses it to protect soldiers from blast noise, gunfire and explosions.<sup>2</sup>

You may not be subjected to the same level of noise these marines faced during their rifle training.

But every day you are bombarded with ear-splitting sounds from our modern world. Things like roaring traffic, screeching trains, leaf blowers, lawn mowers and high-speed blenders.

Our ears weren't designed to deal with these loud noises day in and day out. And it takes a toll on the delicate inner workings of your ears.

You see, your inner ear contains over 15,000 tiny hair cells. They turn sound waves into electrical signals that go to your brain. That's how you hear. But loud noises damage these sensitive cells.

By middle-age you can be left with serious hearing loss. It interferes with enjoying your favorite TV show or having a conversation with your loved ones. You can have chronic whistling, hissing or ringing in your ears.

Most doctors will tell you there's nothing you can do except get some high-powered hearing aids.

But supplementing with NAC not only prevents hearing loss...

## It helps reverse it.

In a recent study, Yale researchers found that NAC boosts your production of a powerful antioxidant called glutathione. And that helps repair the inner ear damage done by loud noises.<sup>3</sup>

NAC is available as a supplement in most health food stores. I recommend taking 250 mg per day. But if you know you're going to a loud concert or sporting event, take 1,200 mg 12 hours before. If the noise is a surprise, take 1,200 mg as soon as possible afterward. Then take 900 mg to 1,200 mg three times a day, with meals, for the next 14 days.

## **Reverse Hearing Loss Naturally**

NAC is just one nutrient that protects your hearing. I use many others with my patients here at the **Sears Institute for Anti-Aging Medicine**. Here are three that can help protect your ears and even reverse hearing loss.

**1. Luteolin.** Luteolin is a powerful antioxidant and one of the few that can cross the blood-brain barrier. It protects the nerve cells in your ears from oxidative damage. It's also a natural anti-inflammatory that can repair free radical damage that harms the hair cells in your ears.

The best way to get luteolin is through your diet. Aim to get at least one serving at each meal. Here are my top picks for foods and herbs rich in luteolin:

Celery	Fresh thyme	Artichokes	Rutabagas
Celery seed	Radicchio	Peppers	Rosemary
Dried oregano	Parsley	Basil	Kale
Mint	Broccoli	Spinach	Brussels sprouts

You can also supplement. For sharper hearing I recommend taking 25 mg per day. **2. Niacin.** Your inner ear, like your brain, has no energy reserves. It depends on oxygen and glucose from the blood supply. When blood flow slows, your inner ear is starved of energy.

Niacin or vitamin B3 is a natural circulation booster. It energizes healthy cells of all kinds. It also fights inflammation and improves hearing in people with sudden hearing loss. And it's been shown to reduce ringing in the ears.

You can boost your niacin levels with food. The best sources are grass-fed beef and organ meats, pastured eggs, chicken and turkey, and wild-caught salmon and tuna. Good vegetarian sources include peanuts, beets, leafy greens, nuts, peas and beans.

You can also supplement. I recommend starting at a small dose of 250 mg per day because too much niacin can lead to "flushing." Increase the amount gradually every month until you get up to 750 mg or 1,000 mg. You can also split your dose into twice a day to help reduce the flush.

**3. Magnesium.** This mineral boosts blood flow to the tiny vessels in the auditory canal. And it supports the health of inner ear hair cells. In one study, 320 Army recruits were exposed to high decibel gunfire during their two weeks of basic training. Those taking magnesium had 50% less hearing damage than a placebo group.<sup>4</sup>

Sadly, over 70% of people are deficient in magnesium.<sup>5</sup> Leafy greens like kale, spinach, and Swiss chard are good food sources. So are quinoa, lentils, almonds, sesame seeds and cacao.

I recommend getting between 600 mg and 1,000 mg a day as a supplement. Avoid magnesium oxide or glutamate. The glycine, citrate, malate, and chloride forms are better choices. Take it with vitamin B6 to increase the amount of magnesium accumulating in your cells.

To Your Good Health,

Al Sears, MD, CNS

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