

# **DMSO: 2025 Guide to Healing Tinnitus, Hearing Loss and Otitis Media**

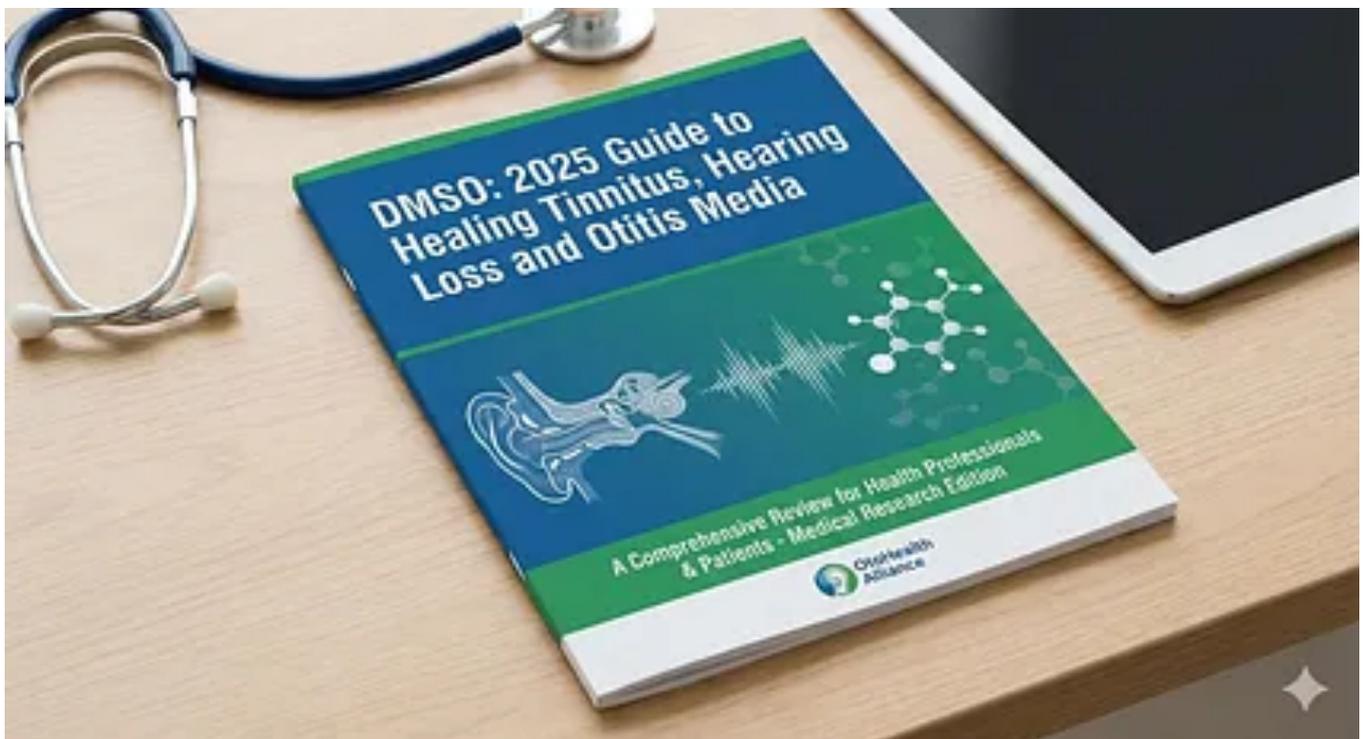
A summary of "A Midwestern Doctor's (AMD's)" post.

[One Day MD, MD](#)

## **Introduction: Unlocking the Hidden Potential of DMSO for Ear Health in 2025**

Imagine a world where the relentless ringing of tinnitus fades into silence, sudden hearing loss regains its clarity, and painful ear infections like otitis media resolve swiftly without endless antibiotics. For millions suffering from these debilitating ear conditions, such relief often feels like a distant dream—trapped in a cycle of symptom management, hearing aids, or invasive treatments with limited success.

Yet, buried beneath decades of overlooked research and growing anecdotal success stories, a simple, natural compound is emerging as a beacon of hope: Dimethyl Sulfoxide (DMSO). Derived from wood pulp, DMSO is a powerful anti-inflammatory solvent with unparalleled ability to penetrate tissues and deliver healing deep into the body.



FDA-approved only for specific uses, its off-label potential for ear disorders has fascinated researchers since the 1960s and 1970s, when small studies showed remarkable results—like complete tinnitus resolution in over 60% of patients.

Fast-forward to 2025: While mainstream medicine focuses on neuromodulation devices, gene therapies, and conventional antibiotics, a wave of real-world reports from forums, patient communities, and alternative health experts highlights DMSO's role in reducing tinnitus intensity (sometimes for weeks), restoring hearing function, and rapidly clearing middle ear infections.

This guide cuts through the controversy, examining the historical evidence, recent anecdotes, safety considerations, and practical applications. Whether you're battling chronic ringing, age-related hearing decline, or recurrent otitis, discover why DMSO deserves serious attention as a complementary tool in your healing journey—backed by science that's stood the test of time and stories that inspire renewed optimism.

## **DMSO and the Ears**

To establish the safety of DMSO in the ear, [a study](#) gave the eardrums of

10 volunteer prisoners five drops of 50% DMSO (in water) or 60% DMSO (in glycerin) three times per day for 74 days. During each application, they first laid on their side (with the ear facing up) for 15 minutes, then had a cotton plug placed in the ear so they could stand up but not have the DMSO leak out (which was then removed an hour later). Various tests and examinations were performed, and no signs of toxicity were detected besides a transient decrease in white blood cells (which regressed on its own and may have been related to a circulating infection in the prison). Once that study established the safety of putting DMSO directly into contact with the ear's tympanic membrane, a variety of other studies were conducted utilizing a similar approach. Likewise, [another human study](#) also found (90%) DMSO had no toxicity to the ears.

*Note: [a 2014 rat study](#) found that applying 1% DMSO to the middle ear did not cause any adverse changes to the inner ear and [a zebrafish study](#) found DMSO did not injure the hair cells in the ear, while [another study](#) of young (4 week old) rats (and [one in cats](#) with high concentrations given for 21 days) found some adverse effects on the hair cells, suggesting early in life, those cells may be more sensitive to DMSO.*

## Impaired Hearing

I believe poor hearing often results from impaired circulation to the ear, and in turn, you will sometimes encounter people who report their hearing improves as a side effect of DMSO usage. For example, after reading [an earlier article](#) about how to use DMSO to heal circulatory disorders (e.g., strokes) and starting oral DMSO, [this reader reported](#):

Within 5 days several things were noticeable a) I pass water far more easily, b) my hearing accentuated, c) my eyesight improved somewhat, d) my mind was that much sharper and e) my blood pressure dropped from 160/90 to 150/80 and I just sense my heart is that much better.

Likewise, I recently spoke to a friend of Stanley Jacob who told me that he had success in treating hearing loss with DMSO and that they vaguely

remembered Jacob had also treated cases of tinnitus with it.

## Tinnitus

Like macular degeneration, most of the treatments I have come across that help tinnitus also improve circulation to the affected sensory organ. Additionally, I have seen many signs suggesting tinnitus is linked to excessive sympathetic activity (e.g., many other treatments I've seen help tinnitus address this component of the disease), which again argues for DMSO's role in this condition (as [by being an acetylcholine esterase inhibitor](#) it increases parasympathetic activity).

While numerous patients with tinnitus have reported DMSO helped them (or their tinnitus improved incidentally from DMSO), I only know of one study that formally evaluated it.

In it, [fifteen patients](#) with tinnitus of unknown origin were selected [for a study](#) (while 2 hearing voices and 3 with tinnitus preceded by acoustic trauma or an aneurysm of the internal carotid were excluded). Each had tinnitus for a prolonged period (6 months was the shortest amount of time) and had not been able to adapt to the noise. At baseline, their characteristics were:

*Note: in 3 cases, the ear ringing was localized approximately between 3,000 and 4,000 Hz, with an intensity of between 15 and 30 dB. In 12 cases, it was masked with a "white" noise between 10 and 12 dB.*

Following one month of receiving a spray with DMSO and a few other drugs, all significantly improved.

*Note: this improvement was sustained for at least a year.*

The increase in tympanic membrane temperature coinciding with an improvement of tinnitus made the investigators suspect poor blood flow (which DMSO improves) was linked to tinnitus. Likewise, in the four patients who only had occasional symptoms, they reported their symptom reoccurrence was tied to exposure to cold weather in the morning, further strengthening the circulatory hypothesis. Additionally:

A notable improvement was observed in the patients who at the beginning of the treatment had suffered from dizziness and positional vertigo. The insomnia of eight patients disappeared, and seven slept better. There was also improvement in headache and otalgia (the latter was not related to temporal-maxillar articulation). Very noteworthy was the modification in the sensorial-neural hypacusis of some of the patients, as expressed subjectively by the patients and confirmed by audiometric examination.

*Note: at [the 1974 symposium](#), this author also presented a paper on how*

*DMSO could be used to treat hearing loss.*

[Another author](#) reported on a clinic in New York City that treated a number of tinnitus patients with DMSO. They noted that in most cases, their ear noises were immediately reduced with DMSO, and that in most cases, the patients were permanently cured within a month, and if it recurred, a second course of DMSO would typically eliminate their tinnitus much faster than the original treatment. Additionally, in many cases, the patients did not report they had tinnitus until they shared that systemic administration of DMSO had improved their tinnitus (which then was fully improved with targeted DMSO treatment).

## **Airplane Ear (Aerositis)**

Some individuals have immense difficulty tolerating altitude changes ([to the point their eardrums can rupture](#)), which in some cases follows an infection that inflames the Eustachian tubes, making them unable to open and accommodate the pressure changes created by increased elevation (which can be extremely painful—I know people who stopped flying because of it).

[In 1967](#), a former president of the [Aerospace Medical Association](#) reported [that DMSO could treat aerositis](#) and aerosinusitis, and that [he had treated 8 cases cases of aerositis and 4 cases of aerosinusitis](#) by spraying 30% DMSO into each nostril, which 75% of the aerositis cases and 100% of the aerosinusitis responded.

*Note: better results may have been obtained by spraying the soft palate and using ear drops.*

## **Safety and Risks for Ear Use**

- Low concentrations ( $\leq 0.25\%$ ) appear safe in lab models; higher can damage hair cells (apoptosis).
- Common side effects include garlic-like breath/odor, skin irritation,

burning sensation.

- Risks involve enhanced absorption of contaminants (use pharmaceutical-grade only) or interactions.
- Avoid if eardrum perforated; consult a doctor.

Direct ear application lacks long-term safety data in humans.

## **DMSO and Ear, Nose and Throat Infections**

[One ENT doctor](#) observed that DMSO would often significantly calm inflammation from an infection related to ear, nose and throat (including severe ones that were difficult to treat with antibiotics). However, the improvement often only lasted for 2-4 hours. However, when he mixed DMSO with an antibiotic, it frequently eliminated the infection in a dramatic fashion (e.g., the eardrum of an otitis media patient would begin shrinking in 10-15 minutes)—especially if the infection was treated early. Unfortunately, because of how rapidly the symptoms often improved, it often caused patients not to follow up when they needed to for the subsequent treatment.

*Note: mixing an antibiotic with DMSO increases its potency, in part because it more easily travels into the body (e.g., in this study, the antibiotic was dissolved in DMSO, directly applied to the eardrum, and then was able to enter the ear), partly because DMSO has its own antibacterial properties, and partly because DMSO decreases antibiotic resistance in bacteria (which will be discussed later in this series).*

Additionally, he also found:

- Because of the marked drying up activity of DMSO, a subsequent treatment with a high-fat cortisone ointment was sometimes necessary to use afterward when treating otitis media.
- For irritating nasal infections or inflamed hair follicles, that the feeling of tension and pain significantly diminished within half an hour of DMSO and

typically, 2-4 applications were required.

- That infections of the throat (e.g., tonsillitis) required internal applications of DMSO onto the inflamed area (rather than from the outside) and that cases with edema frequently had dramatic results (e.g., edema of the uvula often disappeared within hours).

- Significantly facial injuries (all of which had accompanying hematomas and included 2 traumatic hematotympanums and 2 hematomas of the nasal septum) had excellent responses (e.g., the hematomas and swelling distinctly improved on the first day, and the healing process as a whole was reduced to about half to a third of the average time and the 2 nasal septum hematomas did not require an incision or lead to colliquation).

- Three patients who had lost their smell were treated with DMSO. One had a striking response and immediately regained it; the other two had temporary improvements after each administration of DMSO.

- Many patients with stomatitis aphosa (canker sores) have a good response to DMSO. Unlike the other applications, 60% DMSO (applied as a spray) was used.

He [then compiled all of his cases:](#)

Various disorders included: 4 acute facial paralyses (2 improved), 4 herpes simplex (3 improved), 2 chronic Herpes zoster otitis (both rapidly improved), 2 Parotitis (both improved), 2 phlegmons of the mylohyoid (both improved) and 3 anosmias (all improved).

*Note: most of the poor responses in otitis media were in chronic cases. Of the 27, 4 had a "very good" response, 13 had a "distinct improvement" (but generally relapsed in a short time), 10 had "no change" and 1 became worse.*

Other studies have also shown DMSO treats these infections:

- A [1969 study](#) gave DMSO with success to 69 children (37 girls and 32 boys) with otitis media and 17 with maxillary sinusitis. In the otitis media cases, 30-50% DMSO (sometimes mixed with an antibiotic) was poured into a cleaned ear (under slight pressure) and typically passed through the eustachian tube into the nasopharynx (throat). In suppurative otitis media, there was a rapid cessation of pussy discharge from the ears, a return of hearing, and a normalization of the blood. In purulent

inflammation of the maxillary sinus, 30–50% DMSO was given by injection, and cures were achieved in 4–8 days in the majority of cases, with the treatments usually lasting long term.

- [A 1993 study](#) used DMSO in combination with other drugs in 49 patients with external ear inflammation and 10 with acute otitis media, finding DMSO potentiated the other medications (e.g., enhancing antibacterial and antifungal coverage or increasing anti-inflammatory or anesthetizing properties), along with improving their risk-benefit profile and penetration through the skin—with the successes leading the authors to advocate for using these combinations in clinical practice. Likewise, similar results were seen in [a 2004 study](#).

- A 2010 study found that [in patients with purulent ear cartilage](#) inflammation (e.g., due to otitis externa), moist gauze with DMSO, gentamicin, and dexamethasone applied 1–2 times daily reduced ear swelling and pain within 2–3 days, with wounds healed in 10–20 days, compared to persistent swelling and pain after 10 days with gentamicin alone.

- [A 2019 study](#) found DMSO treated chronic tonsillitis.

Finally, one approach for treating middle ear infections is to puncture the ear drum with a needle and drain it. Since this is quite painful, [this doctor](#) decided to try swabbing a drop of DMSO mixed with tetracaine against the ear drum, as DMSO [both potentiates local anesthetics](#) and can allow them to pass through the eardrum without needing to puncture it (which would be immensely painful for any child). In turn, at the 1966 annual meeting of the American Academy of Ophthalmology and Otolaryngology, shared that had done this one 107 patients with serous otitis and 50 with purulent otitis media, of whom 80% had no pain, and 20% only had slight pain.

Likewise, [a 1990 paper](#) reported 80% DMSO mixed with 10% cocaine (a less commonly used local anesthetic) and 10% water or 5% tetraine mixed with 100% DMSO was an effective and tolerable anesthetic for the ear

drums in 164 patients.

Puncturing a child's ear almost always requires putting them under anesthesia, which makes the procedure more costly and has its own set of complications, so having a way to perform the procedure while avoiding anesthesia would be of great benefit (once again making it remarkable this application of DMSO never entered standard medical care).

## Sinusitis

DMSO has often been observed opening blocked nostrils within a few minutes due to its antibacterial and anti-inflammatory effects, which allow it to reduce swelling in the sinuses and promote the healing of inflamed tissue. In addition to the previously mentioned studies where it showed benefit for sinusitis:

- [A large DMSO study](#) included 7 female patients (aged 43-66) who had had sinusitis for 1 week to 9 months and received DMSO. Of them, 2 had a good response to it, and 5 had an excellent response. Likewise,

- In 1965, [Merck sent out guidance](#) to their investigators on what they had learned from treating approximately 4,000 patients for up to 18 months. In it, they mentioned one of the conditions DMSO had shown efficacy for was sinusitis and that "A dilute solution to the nasal mucosa has resulted in the discharge of a great deal of infected material from the sinuses and relief of pain."

- [A 1987 Chinese study](#) of 44 patients with 59 sinus infections found local injection or topical application of 25% DMSO resulted in a 91-95% cure rate (of the 44, 40 fully recovered, 2 improved, 2 had no benefit), with treatment duration ranging from 10 days to 5 years, with an average of 2.36 years for cases over 6 months and 41.1 days for those under 6 months.

- [A 1992 Russian study](#) found administering 10% DMSO to the sinuses followed by local oxygenation, within 2 years, 49 out of 52 children had a

complete recovery (including all cases of maxillary sinusitis) whereas many controls receiving standard treatments did not.

## DMSO and the Mouth

DMSO's therapeutic properties have also led to it being studied for ailments within the mouth. This work has primarily revolved around treating inflammatory conditions and herpes lesions (which, as I show [here](#), have an excellent response to DMSO).

For example, one study found [an anti-inflammatory](#) combination of 70% DMSO and 0.007% Decadron applied 4–8 times daily to oral lesions (e.g., lichen planus, ulcerative stomatitis) in 12 patients for an average of 83 weeks and found to significantly improve but not cure the lesions, and readers here have reported similar results (e.g.,

*Note: [when DMSO was combined Decadron](#) (a steroid) was applied to the mouth, salivary Decadron levels peaked within 15 minutes and returned to normal within 30 minutes.*

Readers have reported similar results (e.g., [DMSO resolved Lichen Sclerosis within a reader's mouth in about a month](#)), and likewise, [authors have reported](#) DMSO is an effective treatment for other small ulcers within the mucus membranes of the mouth and genitals.

DMSO has also been shown to heal inflamed salivary glands:

- [A 1988 Russian study](#) found of adolescent patients found DMSO plus procaine treated chronic parenchymatous parotitis (inflammation of the salivary glands).
- [A 1989 study of 57 patients](#) with exacerbated chronic parenchymatous parotitis found 30-50% DMSO applied topically (e.g., daily for 20-40 minutes 12-14 times) effectively treated it.
- [A 1993 Russian study](#) found DMSO plus short-acting insulin and 5% calcium pantothenate (B5) safely treated 42 patients ages 23 to 62 with

chronic parenchymatous parotitis.

Lastly, [in a study](#) assessing the safety of using DMSO within the mouth it was found that DMSO on average, became tastable at 0.59% (with the detection threshold ranging from 0.005-1.5%), and that while taste increased with concentration, even 100% was not objectionable enough to prevent clinical use. Likewise, when 70% DMSO was applied to the lips and tongue, it was found to cause mild warmth, occasional numbness, smarting, tingling, a distinctive taste, and mild breath odor—effects which were transient and not significant enough to classify DMSO as an effective topical anesthetic. Finally, extensive blood work found no abnormalities from oral DMSO (or DMSO mixed with Decadron), nor any significant local or systemic effects.

## Conclusion

As of late 2025, no strong scientific evidence or regulatory approval supports DMSO as a reliable treatment for tinnitus, hearing loss, or otitis media. Benefits are largely from small, dated studies or anecdotes, outweighed by lack of modern validation and potential risks. Consult an ENT specialist or audiologist for evidence-based options. Self-treatment with DMSO is not advised due to purity concerns and unproven efficacy for these conditions.

Hearing is precious — balance curiosity with caution.

## Acknowledgments

*The authors acknowledge contributions from writings by A Midwestern Doctor. Much of the content is inspired by and drawn from [his Substack](#).*

**Important Disclaimer:** *This article discusses dimethyl sulfoxide (DMSO), an FDA-approved solvent for certain medical uses (e.g., interstitial cystitis), but not approved for Ear, Nose and Throat (ENT) application. Always consult an ENT specialist before trying any off-label treatment.*

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