

For some years now I have been aware of my tinnitus. Before this, however, I'd notice a clock ticking in a room where there were no ticking clocks and I always thought the sound was external. It was for a low hum tinnitus that I eventually saw a specialist, but realised as (successful) washing treatment was arranged that there was another, higher pitched sound, and the consultant tries out drugs for this (so far unsuccessfully). The tinnitus ranges from mild irritation to annoyance.

I got hold of a summary document of Frequently Answered Questions from 1995, which I have here condensed and summarised, but the full document is also available [here](#). The internet [sources](#) come first followed by [references](#), the [UK support group](#), and then the [introduction](#), [diagnostic method](#), [causes](#) and [treatments](#) points.

First however is some material from Jonathan Hazell's book *Tinnitus* published by Churchill Livingstone in Edinburgh in 1987 (ISBN 0443021562) who points out that famous (and infamous) sufferers from tinnitus included Martin Luther, Adolf Hitler, Jean-Jaques Rousseau, Goya and Smetena (I know that he incorporated tinnitus into his music – it does change classical music appreciation!). He tells of Joseph Toynbee (1815–66) who was a pioneer of ear disease pathology and, believing that tinnitus could be cured using chloroform and prussic acid vapours plus valsava subsequently, tried the concoction himself and died, thus becoming tinnitus's first martyr.

The problem of tinnitus is evidenced in the 16th century BCE in Egypt, itself a copy of material from 2500 BCE – about treatment for a bewitched ear. Around 700 BCE the Assyrian's treated tinnitus with incantations and inserted wool plus oils. They wrote:

*Oh thou that spieth,
Oh thou that spieth,
Oh thou that pursueth,
Whatever its name,
Thou on earth art seed of the heavens,
Unto his form as of heaven,
Come not nigh:
Like a mountain thou restrainest,
His form thou hast troubled...
Oh ye four devils of the roads,
Oh ye four devils of the ways,
Get ye to your four quarters...
May Ninurta, Lord of the sword,
Turn you back.
Oh by heaven be ye exorcised,
By earth be ye exorcised!*

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"You can tune a file system, but you can't tune a fish." – tunefs(1M)

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<http://www.cccd.edu/faq/tinnitus.html>

<http://www.cccd.edu/faq/tinnitus.txt>

<ftp://ftp.cccd.edu/pub/faq/tinnitus.html>

<ftp://ftp.cccd.edu/pub/faq/tinnitus.txt>

<ftp://rtfm.mit.edu/pub/usenet/news.answers/medicine/tinnitus-faq>

And many other Usenet *.answers FAQ archive sites

On the Internet, the Usenet newsgroup alt.support.tinnitus is the primary discussion forum. Several other peripheral newsgroups exist where people at risk for tinnitus may be found, as well as for various health disciplines relevant to the treatment of tinnitus.

Some additional resources:

<http://ls10-www.informatik.uni-dortmund.de/~koehne/tinnitus/welcome.html> A German language Web page about tinnitus.

<gopher://phil.utmb.edu/00/UTMB%20ENT%20Grand%20Rounds/TINNITUS> A University of Texas paper on the causes and treatments of tinnitus.

<http://www.bme.jhu.edu/labs/chb> The Center for Hearing and Balance at Johns Hopkins University.

<http://www.boystown.org/hhrr/tinnitus.html> – a link to the Boys Town National Research Hospital's page on Tinnitus.

<http://www.teleport.com/~veda> – the Vestibular Disorders Association (VEDA) is a nonprofit organization that exists to provide information and support to people with inner ear disorders such as labyrinthitis, BPPV, and Meniere's disease.

<http://www.ohsu.edu/~ohrc/ohrc.html> The Oregon Hearing Research Center web server is a truly

must-see server, with plenty of local OHRC information as well as pointers to other online information.

<http://www.aro.org/showcase/aro/> The Association for Research in Otolaryngology has hardcore research abstracts on many things, including cochlear hair cell regeneration.

[To the top](#) Tinnitus: Diagnosis/Treatment

Abraham Shulman, M.D.

Lea Febiger, 1991

ISBN 0-8121-1121-4

This covers all aspects of tinnitus. It was used to confirm most of the medical statements in the original FAQ document.

Hallam, Richard. Tinnitus: Living with the ringing in your ears. Thorsons, HarperCollins Publishers, 77-85 Fulham Palace Road, Hammersmith, London W6 8JB. A straightforward introduction to the nature of tinnitus distress and what can be done about it.

Proceedings of the 1st International Tinnitus Seminar. The Journal of Laryngology and Otology, Supplement 4, 1979.

Proceedings of the 2nd International Tinnitus Seminar. The Journal of Laryngology and Otology, Supplement 9, 1984.

Proceedings of the 3rd International Tinnitus Seminar. Published by Karlsruhe, Germany. 1987.

Proceedings of the 4th International Tinnitus Seminar. Published in France (in English).

Tinnitus: Pathophysiology and Management. Edited by Masaaki Kitahara. Igaku-Shoin, Tokyo, Japan.

Tinnitus. Ciba Foundation Symposium 85. 1981. Pitman Publishers, London.

Tinnitus: Facts, Theories and Treatments. Dennis McFadden (ed.) Working Group 89. National Research Council. National Academy Press, Washington, DC, 1982.

Hazell, Jonathan. Tinnitus. Churchill-Livingstone, London, ISBN #0-443-02156-2, 1987.

Vernon, Jack A. and Moller, A.R. Mechanisms of Tinnitus. Allyn Bacon, Needham Heights, MA. ISBN #0-205-14083-1, 1994.

[To the top](#) United Kingdom contacts...

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The quarterly magazine "Quiet" is inclusive of membership fee.

quinine/anti-malarials
oral contraceptives
chemotherapy

...can be a cause of the condition.

Many tinnitus cases start after severe ear infections.

High blood cholesterol clogs arteries that supply oxygen to the nerves of the inner ear. So reducing cholesterol may reduce tinnitus.

Arteries may press too closely against the inner ear machinery or nerves. This is sometimes correctable by delicate surgery.

Temporo-Mandibular Joint (TMJ) syndrome is a jaw disorder which may cause tinnitus and is characterized by many symptoms, including headaches, earaches, tenderness of the jaw muscles, dull facial pain, jaw noises, the jaw locking open, and pain while chewing. This is detectable by increased tinnitus when clenching teeth, pushing in hard on the jaw with your palm, pushing in on the forehead with your hand hard.

Some car crash victims have reported a sudden onset of tinnitus.

Tinnitus can result from skull surgeries

Stress is not a direct cause of tinnitus, but it will generally make an already existing case worse.

Diet and other lifestyle choices can worsen an existing case of tinnitus. Alcohol, tobacco, caffeine, quinine/tonic water, high fat, high sodium can make tinnitus worse.

Specific foods may trigger tinnitus (not unlike migraines). Problem foods include red wine, grain-based spirits, cheese, and chocolate.

There is a long list of foods that are supposed to be "rich" in salicylates.

Glaucomous tumors can cause pulsatile tinnitus.

Marijuana usage may worsen pre-existing cases of tinnitus.

Certain dental procedures such as difficult tooth extractions and ultrasonic cleaning can cause hearing damage via bone conduction of loud sounds directly to the ear. Wearing ear plugs will not guard against bone conduction.

Intracranial hypertension can cause pulsatile tinnitus. An indication of this is stopping tinnitus by slight pressure to the neck on the affected side. The definite way to find out is if Opening Pressure is higher than 200 with a spinal tap.

Otosclerosis is a bony growth around the footplate of the stapes (one of the 3 middle ear bones). This footplate forms the seal that separates the middle ear space from the inner ear. When the

footplate moves normally, the sound vibrations are passed from the middle ear "chain" of bones into the fluid of the inner ear. If the footplate is fixated, the vibrations cannot pass into the inner ear as well and hence a resulting hearing loss. Tinnitus may also be involved. Treatment is by surgery.

Some people are more at risk than others to loud noise. Any ringing after exposure to loud noise means risk of tinnitus and hearing loss.

Meniere's disease is a very serious disease of the inner ear, resulting in extended vertigo attacks, major hearing loss, and frequently tinnitus.

Endolymphatic hydrops is a condition similar to Meniere's that involves vertigo without hearing loss.

[To the top](#) So for treatments are these (and SUGGESTIONS in some cases)...

Niacin supplements produce a temporary flushing effect that is supposed to pump more oxygen into the inner ear due to vasodilation. Take niacin on an empty stomach for best results. You may experience a flush ranging from a mild sunburn to hot and possibly a "dry mouth" sensation.

There's a strong danger migraine and also of liver damage and therefore death. 50mg twice per day is a common dose for tinnitus. If you experience the flush, then it indicates the maximum benefit. Some people report good results from niacin, other people gain nothing. There is no clinical proof for the effectiveness of niacin in treating tinnitus. This is inherently difficult to prove due to a possible "placebo effect" arising from the niacin flush sensation rather than any therapeutic value of the underlying vasodilation. Additionally, any vasodilation that occurs cannot benefit the cochlear hair cells, because the blood vessel (vas spirale) that feeds these cells cannot expand or contract.

Lecithin with Niacin may work where lecithin, being an emulsifier, helps disperse the build up of fats in the capillaries, and the niacin helps dilate the capillaries to let the lecithin in. Relates to Meniere's syndrome. However, phosphatidyl choline is the active ingredient of lecithin, and as a precursor of acetylcholine should be avoided by people who are manic-depressive because it can deepen the depressive phase. See Smart Drugs Nutrients, Dean Morgenthaler, 1991, Heath Freedom Publications, ISBN 0-9627418-9-2.

Gingko biloba receives a good press with good effects over two months or so but there is doubt about effectiveness. Gingko has been shown to increase circulation throughout the body and the brain.

Many tinnitus sufferers become depressed from having to deal with the constant noise. Treating the depression may make the tinnitus seem less severe. But certain ototoxic anti-depressants may worsen tinnitus. SSRI anti-depressants may temporarily worsen tinnitus for the first few weeks, but risk fewer side-effects as compared to the older tricyclic drugs.

Tricyclic anti-depressants, such as Nortriptyline and benzodiazepines, such as Alprazolam (Xanax) were used in one study in which some people reported improvement. Possible reasons: (1) Patients just think they feel better. (2) Since these drugs are central nervous system depressants, auditory responsiveness diminishes. (3) Tinnitus is stress-related – i.e. muscle tension in neck jaw restricts blood and lymph flow. Alprazolam (Xanax) can be addictive and bring on mellow feelings. Use for a maximum of 4 months, and reduce to nothing, with at least a month's gap; it is best offered when

masking and other therapy does not work. Where it works, tinnitus may remain lower after treatment.

Histamine may be effective, as so might anti-histamine through a mild sedative releasing anxiety.

Meclizine is anti-vertigo but MAY relieve someone's tinnitus.

Vinpocetine (derived from Vincamine) possibly repairs damaged nerve cells, among other things. There are no side effects and it may benefit memory. It improves cerebral circulation and so improves memory, treats stroke, menopausal symptoms, macular degeneration, impaired hearing and tinnitus. However, most people with tinnitus do not have cerebral dysfunction!

Vincamine itself is an extract of the periwinkle. It is a vasodilator and increases blood flow to the brain and improves the brain's use of oxygen. Vincamine has been used to treat a remarkable variety of conditions related to insufficient blood flow to the brain, including vertigo and Meniere's syndrome, difficulty in sleeping, mood changes, depression, hearing problems, high blood pressure and lack of blood flow to the eyes. Vincamine has also been used for improving memory defects and inability to concentrate. Vincamine has extremely low toxicity and is very inexpensive. ...
Precautions: Rarely causes gastrointestinal distress, which disappears when usage is stopped. Vincamine has not been proven to be safe for pregnant women or children."

Hydergine is a drug that works on the brain. It is an extract of ergot, a fungus that grows on rye. It increases blood supply and oxygen to the brain and is said by to reduce dizziness and tinnitus but it is unproven. There aren't any serious side effects. It is nontoxic even at very large doses and it is contraindicated only for individuals who have chronic or acute psychosis, or who are allergic to it. Overdosage of Hydergine may, paradoxically, cause an amnesic effect.

Sodium fluoride may be helpful when the tinnitus is due to cochlear otosclerosis.

Zinc may be useful but up to 150 mg a day can produce toxicity problems and affect the normal absorption of copper.

Diuretics may be prescribed when Meniere's Disease is present but these may even increase tinnitus.

Homeopathic cell salts, Kali Phos and Mag Phos (nerves), Kali Mur (swelling in the inner ear) are homeopathic remedies.

Betahistine hydrochloride (Serc) is useful for short relief from Meniere's Disease but is not for the pregnant or lactating, children, anyone with an adrenal tumor (pheochromocytoma), bronchial asthma, or peptic ulcers. Possible side effects are nausea, gastric distress, headache, rash.

Surgery can result in profound deafness.

Less aggravation from tinnitus may come from no tobacco, no alcohol, no caffeine, low fat, low sodium no quinine/tonic water.

Accupuncture is a possibility, perhaps instead of anti-depressants. May provide temporary relief to

some people.

A good sleep and less stress help.

Hearing aids and variants help those with severe tinnitus by amplification above the tinnitus and by masking through introducing white noise.

Electrical stimulation with various voltages frequencies may provide some relief using external, ear canal, transtympanic, middle ear, and cochlear electrodes have all been tried.

Surgically severing the auditory nerves is drastic action leading to total deafness. However, if the tinnitus comes from the brain, it means deafness and tinnitus at the same time, which would be really awful. Tinnitus might even increase after total deafness.

In feedback therapy each subject's tinnitus sounds get reproduced and played into the ear with reductions in noise level so that the subject thinks down the tinnitus. In other words, over several sessions, people can be trained to "not hear" their tinnitus by actually reducing the sound levels heard. It needs trained audiologists and it could be nonsense.

Auditory Integration Training (AIT) involves listening to music that has been altered such that the high frequencies an