TINNITUS

What is it?
Its full name is *tinnitus aurium*. Tinnitus in Latin means jangling or din, hence the Latin name ‘ear din’. It refers to a constant or intermittent subjective sensation of sound (ringing, whistling, booming, hissing, etc) in one or both ears. It generally afflicts the elderly, and many varying but unsubstantiated explanations for the mechanism behind it exist.

Whom does it affect most frequently?
They are most affected who are exposed to high levels of noise in their occupations, whether that be in industry or in a rock music band, for instance.

Tinnitus and Vertigo
Tinnitus in the younger person (under about 50 years old) is often associated with vertigo. This combo may be due to very many causes [*R. L. Souhami & J. Moxham. Textbook of Medicine, 3rd ed, Churchill Livingstone: Edinburgh, 1997, pp 1075 & 1076*]:
- A disturbance in the semicircular canal of the inner ear, or of the vestibular nuclei of the brain stem, which are the centres that control your balance.
- Episodes of low blood-glucose levels (hypoglycæmic attacks).
- High blood pressure.
- With herpes zoster - the so-called Ramsey-Hunt syndrome, in which there is VII-th cranial nerve involvement.

An infection affecting the organs of balance in the inner ear. This usually starts off as a cold or ‘flu, and may develop into a condition called labyrinthitis, or it may be the result of taking so-called ototoxic drugs (ones that adversely affect hearing or the ears, and produce tinnitus: e.g. Aminoglycoside antibiotics, Aspirin, Cytotoxic drugs, Loop Diuretics, or Quinine [*D. McFerran, FRCS. Drugs, Food and Drink, leaflet issued by Br Tinnitus Ass, Feb 2005*]).

Anæmia.
The inner ear disorder known as Ménière’s disease.
Tinnitus and vertigo may also occasionally be a side-effect of antibiotics (the said Aminoglycosides, like Gentamicin, or Streptomycin [which cause permanent vestibular and auditory damage; but refer to Chinese Herbal Medicine below], or the taking of excessive amounts of *Uva ursi* [common Bear’s grape; its effects, fortunately, are reversible [*D. J. McKenna, K. Jones & K. Hughes. Botanical Medicines – The Desk Reference, 2nd ed, Hawthorn Press, Inc: Binghamton, NY, 2002, p 1000*], or simply the result of yeast fermentation in the gut, when some alcohol is released into your bloodstream).

Excessive alcohol consumption, food poisoning or heat-stroke.
Atherosclerosis, which by clogging certain arteries can reduce blood supply and oxygen to parts of the brain (cholesterol to be checked).
In rare cases a tumour of the brainstem, or multiple sclerosis, or carotid sinus
syncope (transient impairment of cerebral blood flow), or temporal lobe seizure (this is a type of epilepsy).
Up to 50% of individuals with tinnitus and vertigo due to labyrinthitis will have had a cold or other viral infection shortly before the onset of the symptoms;
Sometimes mild tinnitus and vertigo are produced by wax jammed against the ear drum;
Finally, there is what osteopaths and chiropractors call cervical vertigo and tinnitus, which can be produced by proprioceptive in-put from certain neck muscles or ligaments, or the sternocleidomastoid muscle. [L Wing & W W Hadephobes, Cervical Vertigo, Aust N Z J Surg, 1974, 44(3): 275-277; O Jepson, Dizziness Originating in the Columna Cervicalis, J Can Chiropr Ass, 1967, 11(1): 7-8; and W W Hargrave, The Cervical Syndrome, Aust J Physiotherapy, 1972, 18th Dec: 144-147.]

Your Osteopath, Chiropractor, Audiologist or GP may carry out tests on your ears, eyes, neck, and nervous system in search of the underlying cause, which can then be treated appropriately; or may sometimes suggest a computer-assisted tomographic (CT) scan of the brain.

**Tinnitus in Children**
Because a child’s ear problems may sometimes be associated with serious predisposing conditions, self-prescribed treatments are not recommended. The table below indicates how a parent may recognize serious conditions of the ear:

<table>
<thead>
<tr>
<th>Symptom</th>
<th>When to worry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain in the ear</td>
<td>Severe, with fever</td>
</tr>
<tr>
<td>Discharge from the ear</td>
<td>Long duration</td>
</tr>
<tr>
<td>Vertigo</td>
<td>Severe</td>
</tr>
<tr>
<td>Deformity of the ear</td>
<td>Severe</td>
</tr>
<tr>
<td>Lumps around or on the ear</td>
<td>Severe, if with redness, pain and deafness</td>
</tr>
<tr>
<td>Headaches</td>
<td>Progressive, severe with short history, with some central nervous system symptoms</td>
</tr>
<tr>
<td>Facial weakness</td>
<td>With history of ear pain</td>
</tr>
<tr>
<td>Deafness</td>
<td>Short history, progressive</td>
</tr>
<tr>
<td>Tinnitus</td>
<td>Progressive</td>
</tr>
</tbody>
</table>

As an important aside, you may be amazed to find out that several investigations showed no real differences in the clinical course of acute otitis media, where tinnitus often plays in the background, when placebo was compared with conventional treatments. That is, no differences were evident between non-antibiotic therapies, myringotomy (incision in the ear drum), myringotomy with antibiotics, and antibiotics alone. Yet, significantly, patients not taking antibiotics did, in fact, have fewer recurrences than those given antibiotics [L van Buchen et al, Lancet, 1981, 2: 883-887; M Diamant and B Diamant, Arch Otol, 1974, 100: 226-232; N. Mygind et al, Clin Otol, 1981, 6: 5-13]. My own experience has been that such a child does
best with cranial osteopathy, such as is offered by the Osteopathic Centres for Children in London and Manchester. Yet, in any event, giving nothing has been shown, paradoxically, to be better than giving antibiotics.

**Allergic Tinnitus**
This comes on in sudden attacks, lasting from a few minutes to a few hours. Technically it is referred to as ‘otologic allergy’. Tinnitus may be unilateral or bilateral, and the sound is, as a rule, high-pitched. Hearing is often also impaired, but returns to normal between attacks. Each episode of allergic tinnitus can be explained on the basis of an oedematous reaction in the structures of the inner ear and labyrinth [L H Cripp. *Clinical Immunology and Allergy*, 2nd ed, Grune & Stratton: London, 1969, p 385]. As early as 1893 the Viennese physician Heinrich Quincke, who eleven years earlier had first described the allergic swellings of giant urticaria (hives) [H I Quincke. *Monatshefte Praktischer Dermatologie*, 1882, 1:129-131], referred to the possibility of this being caused by urticaria-like swellings affecting the middle ear. In short this is not a novel unproven concept or cop-out, as is now often maintained.

**What can I do about my tinnitus?**
Natural medicine can successfully treat many types of tinnitus. I suggest that you follow a step-by-step approach to treatment, each step of which has published hard-science backing, though, inevitably, there are always the ±40% who are non-responders.

**Manual Therapies**
The first port-of-call for most people with buzzing in the ears is an osteopath or chiropractor, who may attempt to manipulate your neck or jaw. Only very occasionally does this help tinnitus, while vertigo, which is related, often responds well [A Stoddard. *Manual of Osteopathic Practice*, Hutchinson & Co: London, 1974, p 230].

**Dietary Therapy**
Hypersensitivity to foods containing salicylates
Salicylate sensitivity is the body's inability to handle more than a certain amount of salicylates at any one time. A salicylate sensitive person may have difficulty tolerating certain fruits, vegetables, or any products which contain aspirin. A large number of common foods contain salicylates. **By abstaining from the foods concerned, those who are sensitive to salicylates find relief** [Am J Otol, 1989, 10(3):256; and AADA News, 1987, 5(4):10]. The following web-site has a list of foods showing the salicylate content of many common foods conveniently graded: HYPERLINK "http://allergies.about.com/od/salicylate" http://allergies.about.com/od/salicylate. If you do not have access to the internet, there is also an ungraded list of the foods containing salicylates available in printed form [J Brostoff & L Gamlin. The Complete Guide to Food Allergy and Intolerance, 2nd ed, Bloomsbury Publishing Ltd: London, 1992, Appendix II, p 301].

Vitamin and Nutritional supplementation
A double-blind crossover randomized controlled trial (n=30) of melatonin found no overall superiority over placebo, although a subgroup analysis indicated better results in patients with bilateral than with unilateral tinnitus[Rosenberg S I, Silverstein H, Rowan P T, Olds M J. Effect of melatonin on tinnitus. Laryngoscope, 1998, 108:305-310]. **It has been shown that supplementing your diet with a combination of vitamins A and E can often improve or sometimes even cure tinnitus** [Acta Vitminol Enzymol, 1985, 7 Suppl: 85-92; and Arch Otolaryngol, 1991, 5:515-526].

Acupuncture
A systematic review of six randomized controlled trials of acupuncture or electro-acupuncture found no convincing evidence of effectiveness [Systematic review: Acupuncture for Tinnitus, Arch Otolaryngol, 2000, 126:489-492]. Two open trials involving 185 patients comparing acupuncture to other interventions reported some beneficial effects, but four sham-controlled trials had negative results. Methodological limitations restrict the conclusiveness of the results. **Yet, there may be some short-term benefits in acupuncture for some sufferers. You may wish to try it.**

Mineral status
**Check your mineral status** by means of an atomic emission and atomic absorption hair mineral analysis. When there are deficiencies of zinc, magnesium and potassium evident, **taking appropriate supplements has been shown to help** [for zinc: Am J Otol, 1986, 7(6):476-477; for magnesium: Med Hypotheses, 1983, 10(4):353-358; for potassium iodide: Am J Otol, 1989, 10(3):256].

Biofeedback
Positive results for biofeedback have been reported in randomized controlled trials when compared with no treatment [White T P, Hoffman S R, Gale E N. Psychophysiological therapy for tinnitus, Ear Hearing, 1986, 7:397–399], sham feedback [Podoshin L, Ben-David Y, Fradis M et al. Idiopathic subjective
Phytotherapy
A systematic review of five randomized controlled trials of Ginkgo biloba involving 541 patients compared with placebo or orthodox pharmacotherapeutic treatment concluded that the evidence was favourable [Systematic review: Ginkgo for Tinnitus, Clin Otolaryngol, 1999, 24:164-167]. In my own experience, Ginkgo biloba has helped a fair number of sufferers.

Chinese Herbal Medicine
Drynaria rhizome (in Chinese: gū sui bū) has shown its usefulness in the treatment of the damaging effects of streptomycin. Preparations of the root of this herb were used to treat 21 patients afflicted with the ototoxic effects of streptomycin, with success in all but two cases within three days. However, when the herb was stopped the symptoms re-appeared, but administering the herb again stopped the problem once more [o Bensky & A Gamble. Chinese Herbal Medicine Materia Medica, rev ed, Eastland Press, Inc: Seattle, Washington, 1993, p 350 under ‘Pharmacological and Clinical Research’]. This herb now has a definite place in controlling tinnitus and hearing loss from streptomycin.

Homœopathy
Hahnemannian pathogenetic experiments (provings), conducted by P C Majundar and L Chakrabarti, on the seeds of Melia azadirachta indica (which contain the resin margosa) established the remedy’s homœopathic indication for tinnitus [F Lamsson. Pathogénese de Azadirachta indica. Annales Homœopathiques Françaises, 1968, 10(3):851-856]. Similarly, the homœopathic provings, undertaken by V G Divanji in 1931, using a very low potency (1x) of Ocimum sanctum (Monks’ Basil), established this remedy’s affinity to tinnitus [The Homœopathic Recorder, 1931, 46:596]. Both these remedies now flag tinnitus in their published symptomatology [W Boericke. Pocket Manual of Homœopathic Materia Medica with Repertory and Indian Drugs, B Jain: New Delhi, 1990, pp 1052 & 1070]. Have a qualified homœopath prescribe one of these proven remedies in a lower potency. By contrast, a double-blind randomized controlled trial (n=28) of a homœopathic remedy called ’Tinnitus’ (the substance of which remained unspecified, but was believed to be potentized malleus, the hammer-like ossicle in the inner ear) found no superiority over placebo for intensity or intrusiveness of tinnitus or any audiological measures [Simpson J J, Donaldson I, Davies W E. Use of homeopathy in the treatment of tinnitus, Br J Audiol, 1996, 32:227-233].

Hypnotherapy
Three randomized controlled trials have suggested that hypnotherapy or self-hypnosis is comparable or superior to counseling or masking interventions in reducing subjective tinnitus symptoms [Scand Audiol, 1990, 19:245-249; Audiology, 1993, 32:205-212; and J Laryngol Otol, 1996, 110:117-120]. The evidence for this therapeutic approach is encouraging.
Relaxation

Salt intake
For tinnitus that hasn’t responded to the natural therapeutic approaches mentioned so far, reducing your daily intake of salt (NaHCl) to 150-400 mg may help [J Appl Nutr, 1988, 40(2):750-784].

Toxic metal load
If your body carries high levels of aluminium and/or lead (as demonstrated in a reputable hair mineral analysis), you are at greater risk of developing tinnitus [P Yannik & J G Clark. Tinnitus and its Management, Charles C Thomas: Springfield, Illinois, 1984]. You should, therefore, reduce your toxic metal load, which may lessen the intensity and intrusiveness of your tinnitus [M A Howard. Townsend Letter, Feb/Mar 1985, p.31].

Rutin to the rescue
If nothing else has worked, you may improve or completely resolve symptoms by taking a rutoside supplement, specifically the one called 7-mono(O-beta-hydroxyethyl) rutoside, a bioflavonoid related to rutin, which has both a histamine-liberating capacity (helpful in allergic tinnitus) and, like Ginkgo biloba, is a particularly good remedy when your tinnitus is caused by a circulatory problem [Otolaryngol Polon, 1989, 43(3):214-217].

Tinnitusmaskers
The wearing of a ‘Tinnitusmasker’ has brought relief to resistant cases and in instances when there has only been partial relief of the annoyance of tinnitus symptoms. It resembles a hearing-aid and produces a rushing sound (‘white noise’), which makes you unaware of your own ear-sounds [H Schilcher & S Kammerer, Leitfaden Phytotherapie, Urban & Fischer Verlag: Munich, 2000, p 800].

The overall view
Given the lack of effective conventional treatment options, and the fact that the natural therapies I have mentioned above carry few risks yet show some promise, they must, surely, be worth considering seriously.

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