



Tinnitus Relief

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Literature Education Series On Dietary Supplements

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Tinnitus may be described as a ringing in the ear. It may also be a buzzing, roaring, whistling, or hissing quality or may involve more complex sounds that vary over time. Tinnitus may be intermittent, continuous, or pulsatile (synchronous with the heart beat). An associated hearing loss may be present as well.

There seems to be more than one possible mechanism involved in tinnitus. As a matter of fact, tinnitus may occur as a symptom of nearly all ear disorders, including obstruction of the external auditory canal, infectious process, eustachian tub obstruction, cardiovascular/circulatory disorders, and more.¹ For many, circulation seems to play a major role in tinnitus. An individual with tinnitus should seek a physician's evaluation to determine the mechanism which is specific to him or her.

The good news is that various natural substances have been shown to help provide relief to individuals suffering from tinnitus. These substances include Calcium, Vitamin B1, Vitamin B2, Vitamin B12, Zinc, Ginkgo biloba, Cytochrome C, Omega-3 Fatty Acids, and certain traditional Chinese herbs.

Calcium

An experiment in rats with salicylate-induced tinnitus, demonstrated that a calcium supplement was able to attenuate the behavioral manifestation of this condition. The results are consistent with

the hypothesis that GABA-mediated disinhibition is involved in the processing of tinnitus-related neuronal activity.²

Cytochrome C, vitamins B1 & B2

In this study, nine patients with mitochondrial encephalomyopathy were treated with a combination of cytochrome C, flavin mononucleotide, and thiamine diphosphate. Mitochondrial encephalomyopathy is characterized by a variety of symptoms including, but not limited to, tinnitus. Clinical improvement was obtained in eight of the nine patients. This included improvement in tinnitus.³

Vitamin B12

This study examined the incidence of vitamin B12 deficiency in three groups of subjects. One of the groups included 57 patients with chronic tinnitus. The results indicated that patients with tinnitus exhibited vitamin B12 deficiency in 47% of cases. This was significantly more than normal subjects who exhibited vitamin B12 deficiency in 19% of cases. The authors suggest that there is a "relationship between vitamin B12 deficiency and dysfunction of the auditory pathway." They also noted that improvement in tinnitus and associated complaints were observed in 12 patients following vitamin B12 replacement therapy.⁴

Zinc

In one study, a relationship between was established between 115 patients suffering from, and low blood zinc levels (hypozincemia). In another study, zinc supplementation in patients who were marginally deficient in zinc was shown to improve tinnitus.^{5,6}

Ginkgo biloba extract

There are at least three human studies and one animal study demonstrating the efficacy of Ginkgo biloba extract (GBE) in treating tinnitus.

The human studies utilized large groups of tinnitus patients: 80, 103, and 259. In addition, Germany's Commission E has a Ginkgo monograph which also identifies this herb as an effective treatment for tinnitus.^{7 8 9 10 11}

Omega-3 fatty acids

In 1980, research published in a British medical journal suggested that certain "baropathic" disorders, including tinnitus, may be related to prostaglandin disturbances induced by primary or secondary essential fatty acid deficiencies. Subsequent research published in an American journal discussed the relationship between omega-3 fatty acids supplements, and amelioration of certain mental disorders which included tinnitus as a symptom.^{12 13}

Traditional Chinese Herbs

From a Chinese medicine perspective, a cursory review of the available literature reveals that at least 20 formulations of substances in the materia medica may be used to treat the various clinical manifestations that include tinnitus among their presenting symptomatology. These include the following herbs: Shan Zhu Yu (Dogwood Fruit), Shi Chang Pu (Acorus Rhizoma), Xiao Mao (Curculiginis Rhizoma), Yin Xing (Ginkgo Biloba), Xiang R Kuei (Sunflower), Lu Gen (Phragmitis Rhizoma), Ku Ding Cha (Ilicis Latifoliae Folium), Ze Xie (Alism), Chai Hu (Bupleurum), Shan Yao (Chinese Yam), Gu Sui Bu (Drynariae Rhizoma), Ci Shi (Magnetite), Fu Ling (Poria Coscos), Dan Pi (Cortex Mortar Redicis), Guo Qi (Lycii Berry), Cang Er Zi (Xanthii Fructus).

Many of these herbs were discussed in The Protocol Journal of Botanical Medicine.¹⁴ In other research, subjects with tinnitus were divided into two groups. The control group was given only western medicine, while the other group (TCM-WM group) was given western medicines and traditional Chinese medicines. The western medicines included valium, nicotinic acid, mixture bromides, B vitamins, ATP and carbamazepine. The traditional Chinese medicine included a mix of many of the aforementioned herbs. The results showed that in the TCM-WM group, 84.4% showed absence or improvement of tinnitus. In the control group, 55.6% showed absence or improvement of tinnitus. The authors conclude that the therapeutic results of the TCM-

WM group were better than those of the controls.¹⁵

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