### What is Tinnitus?



Tinnitus is the term used to describe the condition of having ringing, buzzing, or noise in the ear or originating from the head. The word tinnitus is Latin and means ringing. 17% of the American population or about 44 million people in the United States have tinnitus. Of that 44 million people, 8 million of them considered their tinnitus to be a significant problem and approximately 2 million considered it to be debilitating. According to the Tinnitus Association of Canada, the numbers are proportionately similar in Canada.

### What causes Tinnitus?

Tinnitus can be caused by many things and is usually a symptom of an underlying condition. The treatment for your tinnitus will depend on the condition that is causing it, the severity, any accompanying issues - such as hearing loss - and the impact the tinnitus has on your daily activities. Common causes of tinnitus include: stress and depression, hearing loss, exposure to loud noises, earwax buildup or blockages, abnormal bone growth in the ear, Meniere's disease, head or neck injuries, benign tumor of the cranial nerve, and/or certain medications. To find out the root cause of your tinnitus, your physician or audiologist will conduct a complete medical history, as well as a complete examination.



## How does Eastside Audiology & Rehabilitation treat tinnitus?

There are many different treatment options for tinnitus, however, at Eastside Audiology and Rehabilitation Inc., we have two audiologists - Dr. Debbie Davis Au.D, and Amanda Forster M.S. Aud (C) - that are a part of a small number of audiologists in Canada that have been trained to provide Tinnitus Retraining Therapy (TRT). Both of our audiologists were trained directly under the supervision of Dr. Pawel Jastreboff of Emory University in Atlanta. Dr. Jastreboff is the developer of TRT and with his neuropsychological model of tinnitus and hyperacusis; the goal of TRT is to retrain the brain to ignore the sound of your tinnitus so that you will no longer be bothered or annoyed by your tinnitus. Tinnitus Retraining Therapy depends upon the natural ability of the brain to "habituate" a signal, to filter it out on a subconscious level so that it does not reach conscious perception.

Importantly, habituation is a passive event, in contradistinction to "ignoring" something, which is an active event. Thus habituation requires no effort. People frequently habituate many auditory signals - we initially hear sounds from, for instance, air conditioners, computer fans, refrigerators, and gentle rain only to have their signals rapidly disappear from conscious awareness unless we purposely seek them out. (A few seconds after a refrigerator "kicks on," we no longer "hear" it.) The two elements that air conditioners, computer fans, refrigerators, and gentle rain have in common are that the signals they emit have no importance, and that the signals are not perceived as "loud."

The signal of tinnitus has great meaning to the tinnitus sufferer, and it is, indeed, perceived as loud. The entire thrust of TRT is (1) to remove the meaning from the signal and (2) to convert it from a loud sound to a soft sound - so that it can be naturally and effortlessly habituated. More specifically TRT is a method of retraining the brain to process the loud meaningful tinnitus signal ... as a signal that is not loud and not meaningful - so that the tinnitus can be naturally and effortlessly habituated. Thus, Tinnitus Retraining Therapy is a protocol for the facilitation of habituation.

The two key components to TRT are Educational Counselling and Sound Enrichment. Educational Counselling involves intensive patient education about the auditory mechanism and the role the brain plays in tinnitus perception. With education, the tinnitus will be demystified, and it will help reduce the distress and anxiety associated with the tinnitus. Sound Enrichment involves the use of ear level or table-top sound generators and/or hearing aids to provide continuous stimulation of the auditory system to interfere with the perception of tinnitus. This would also include the use of environmental sounds and, again, will help reduce distress and anxiety about the tinnitus.

\*elements from: Dr. Stephen M. Nagler, MD, FACS www.tinn.com



# How Do I Book a Tinnitus Retraining Therapy Appointment?

Please call our front desk. At Eastside Audiology we generally book two different types of tinnitus assessments:

- 1. **Pre-TRT Assessment**. A Pre-TRT assessment is 1 hour in length and it includes a hearing test. This appointment is typically for people who suffer with ringing in the ears, but it is not "taking over their life". The counselling for this appointment will go over all audiological results with much of the counselling focusing on tinnitus.
- 2. Tinnitus Retraining Therapy Initial Assessment. This assessment is booked once we have received answers from a questionnaire (supplied by Eastside Audiology), and if the TRT audiologist recommends bypassing the Pre-TRT Assessment. During this appointment expect to receive extended tinnitus specific diagnostic testing that has a patient specific educational component. The goal of this appointment is to categorize the tinnitus to recommend the proper protocol for a treatment plan that fits each patient's individual needs. Expect to leave this appointment with tools to take back control of your tinnitus and a greater understanding about your specific tinnitus issues. This appointment is typically for people who cannot live their day-today lives without being strongly affected by the ringing in the ears.

### Anything else I need to know?

Prior to commencement of any TRT appointment, medical clearance is recommended so that any form of tinnitus that may be medically or surgically treatable can be ruled out. It is important to note that TRT is not a quick fix. It typically takes 12-24 months for the brain to habituate (tune out) the tinnitus signal. TRT is a treatment and is not a cure. Consequently, there are no guarantees, \*but\* over 80% of TRT patients have reported significant improvement. Once habituation is achieved, further intervention is normally not required.

If you suffer from tinnitus, you <u>can</u> get your quality of life back again.



"for more info on what we do, we recommend Googling the philosophies of Dr Pawel Jastreboff, Tinnitus Retraining Therapy, and Tinnitus.org"

