

## **Basic Information about Auditory Integration Training (AIT)**

**Written by Stephen M. Edelson, Ph.D.  
Center for the Study of Autism, Salem, Oregon**

Based on many of the telephone calls I have received at my research center, it is apparent that confusion exists about AIT. I am writing this letter to provide basic information about AIT as well as to clarify many of these issues.

1. A health care professional should examine the individual's ears prior to AIT to ensure there is no excessive wax and/or fluid. Excessive wax or fluid may reduce the volume of the AIT input. It is the responsibility of the practitioner to ensure that this has been done prior to AIT.
2. The listener receives 18 to 20 listening sessions, and each listening session lasts for 1/2 hour. In most cases, the listener has two sessions a day for 10 days. At some AIT clinics, the listening sessions are given for 10 consecutive days; however, it is also acceptable to have a 1- or 2-day break after 5 days of listening. The number of sessions and length of the sessions are not subject to change until formal research procedures determine that such changes are beneficial.
3. During the listening sessions, the person listens to processed music. That is, the AIT sound amplifier deletes low and high frequencies at random from the compact discs, and then sends this modified music through headphones to the listener. This random selection of frequencies is termed 'modulation.'
4. The intensity level (volume) during the AIT listening sessions should not exceed 85 dBA (slow scale) and may be set at much lower intensities depending on the individual's comfort level. Basically, the music is played at a moderately loud, but not uncomfortable, level. The 85 dBA level for a total of one-hour per day is well below the Occupational Safety and Health Act (OSHA) guidelines for non-hazardous noise levels. The OSHA Noise Standard permits exposure to an average noise exposure of 85 dBA for eight continuous hours. For reference, 85 dBA is approximately as loud as standing 5 feet from a vacuum cleaner, with 92-94 dBA as loud as wind noise in a car with the window down. It is also important to note that the perception of intensity varies considerably depending on the pitch of the sound. For example, a high-pitched song sung by Carly Simon may be perceived as louder than one sung by a male vocalist such as Gordon Lightfoot even though both may have the same dBA measurement.
5. Audiograms are typically obtained prior to, at the mid- point, and at the completion of the AIT listening session. The first and the mid-point audiograms are used to set filters on the AIT machines. These filters are used to dampen (40 dBA or more) those frequencies which the person hears too well (peaks).
6. Dr. Guy Berard, developer of Berard method of AIT, and Bill Clark, developer of the BGC method of AIT, state that filtering peaks is optional for the developmentally disabled population. In addition, Dr. Bernard Rimland, Director of the Autism Research Institute in San Diego, and I have conducted an empirical study on 650 individuals with various degrees of autism and have found that filtering peaks in one's hearing is not related to one's level of improvement using various post-assessment measures. The music is modulated throughout the 10 hours of listening, whether or not peaks are filtered.
7. AIT involves several components including some audiological work, behavior analysis and management, educational issues, and after-care counseling for the client and family. The most satisfactory results can be obtained when a multi-disciplinary team approach is used for the

administration of the AIT program. The Society for Auditory Integration Techniques (SAIT) recommends a multi-disciplinary team which could include (but is not limited to) specialists in the fields of audiology, psychology, special education, and speech/language.

[Click here](#) to visit The Society for Auditory Integration Techniques' Internet Web site.

The Autism Research Institute distributes an information packet on auditory integration training.

[Click here](#) to learn how to obtain this packet.

---

©1995, [Copyright information](#)