

Our ears never sleep...

By Dr. Mary Maddock Au.D.

Our ears never sleep. We can't turn them off – not even when we are asleep. Every day we are exposed to a world of sounds. Our ears, therefore, need to work very accurately for us to be able to orient ourselves. And still, we take good hearing for granted – that is, until we lose it. The importance of our sense of hearing often only becomes evident, when we are in fear of losing it. However, being aware to this can be the first step towards prevention.

Why do we depend so heavily on our sense of hearing?

It is our ears' responsibility to pick up the sounds in our environment and then to sort those sounds into categories of pitch and loudness. The sound is then transferred to the brain for interpretation. Our brain relies on the ear. Without accurate categorization of the sound the brain will not be able to correctly interpret and focus on more important sounds.

First orientation in the world and development of language skills

An unborn child perceives sounds, voices and even music in his mother's womb and retains this information as unconscious memories in his brain. Later on, he will associate security and protection with these familiar sounds. Once born, he needs a well functioning sense of hearing to learn and understand language.

Security

Good hearing facilitates spatial orientation and the perception of life-saving sounds (i.e. in traffic). How often does it happen that we hear an approaching car before we even see it? To judge how close the vehicle is and to determine its precise direction, we need two well functioning ears.

Communicating with people

Hearing gives us access to the world of spoken language and therefore to direct communication with other people. It is the key to our social relationships and activities, where hearing slight nuances is of utmost importance, because when communicating, it is not only the words themselves that count but also intonation, volume, etc. What if we could not perceive these subtle details when communicating?

Pleasure and quality of life

Various sounds like music, nature or voices of loved ones reach us on an emotional level. Our sense of hearing thus contributes to our quality of life.

Consequences of hearing loss

Psychological and social consequences

Not treating a hearing loss can lead to a significant reduction in the quality of life to people, especially in terms of social contacts and mental well-being. In 1999, the

National Council on the Ageing (NCOA) carried out research on this topic with hearing impaired people over 50. This study is still representative and often referred to in various other studies. Research has shown that hearing impaired people who do not wear a hearing instrument suffer more often and more significantly from the following:

- Depression and sadness
- Anxiety
- Paranoia
- Reduced social activity
- Emotional insecurity
- Concentration problems
- Sexual problems

However, the studies showed that the quality of life of most hearing impaired people significantly improved with the use of a hearing instrument:

- Better relationships within the family
- More self confidence
- More stable mental health
- More independence and safety

Physical consequences

Physical problems occur as well, if a hearing loss remains untreated. In addition to a general feeling of unease, the following symptoms occur frequently:

- Fatigue and exhaustion
- Headache and muscle pain
- Vertigo
- Stress and high blood pressure
- Eating and sleeping disorders
- Stomach problems
- Sexual problems

Solutions For Hearing Loss

Solutions come in the form of high-tech hearing instruments that incorporate virtually invisible, intelligent mini-computers. These are tiny in size, yet enormous in impact. Overwhelming evidence shows that the use of a hearing instrument brings major improvement in the quality of life of its users. These individuals enjoy better overall health than non-users with hearing loss, gain self-confidence, play a more active role in family, social and business activities and even have greater earning power.

The right choice of hearing instrument type and technology is determined by the individual hearing loss, the lifestyle of the wearer and anatomical features of the ear.

Digital hearing instruments are programmed by a hearing care professional via a computer. Within the hearing instruments, acoustic signals are transformed at high speed

and with great precision. This allows much more complex calculations and adjustment of the amplified signal than is possible with analog technology. It gives greater flexibility in providing individualized solutions to hearing loss, and allows the addition of features which give the instruments higher value across a greater number of listening situations. Even with the best technology available it is not possible to actually restore hearing to normal levels. However, appropriate, well fit digital hearing aids will provide significant improvement to hearing.

Wireless technology (FM)

Noise, reverberation, and distance: These are the three barriers to understanding speech. Whenever even latest-generation hearing instruments approach the limits of their capabilities, FM technology, combined with hearing instruments, significantly enhances the ability of hearing-impaired people to communicate in the most difficult listening situations. Barriers to clear hearing can be successfully overcome because speech and sound are transmitted directly to the hearing-impaired person's ears, without interfering noise.

(article contributed by Phonak Hearing Systems)

To find out more about your hearing and current hearing technology contact Dr. Mary Maddock Au.D. - Wilmington Hearing Specialists 791-4755. Her offices are located in Wilmington on Floral Parkway and in Southport at Southport Chiropractic