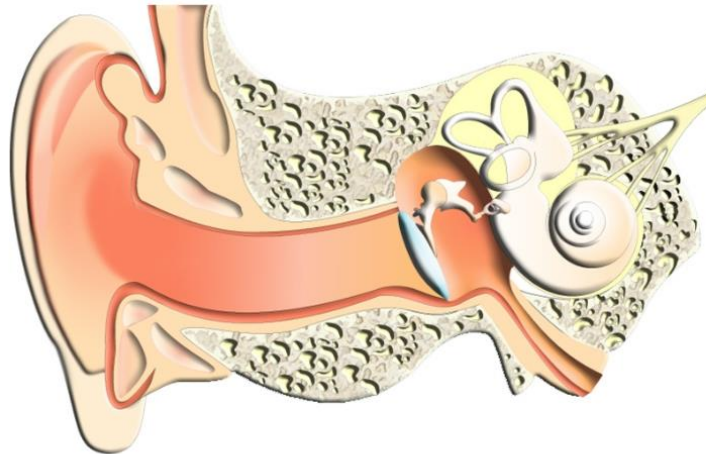


The entire hearing process – the stations of sound in the ear

Taking in sounds through the outer ear

During the hearing process, sound waves are converted into nerve impulses in several stages. First, the sound waves pass along the ear canal to the eardrum, causing it to vibrate.



Sound transmission in the middle ear

The eardrum is caused to vibrate by the sounds reaching it. The movements of the ossicles: malleus, incus, and stapes, transfer the vibrations of the eardrum to the inner ear.

Sound transduction in the inner ear

The membranous cochlea contains the organ of Corti. This is the actual hearing organ because this is where the movements in the endolymph fluid are converted into nerve impulses. This conversion takes place in the hair cells. The hair cells are sensory receptor cells linked by the tectorial membrane.