

## **Central Auditory Processing Difficulties**

What are Central Auditory Processing Difficulties (C.A.P Difficulties)?

This term refers to a breakdown in the auditory system at a point somewhere along the nerve pathways that take auditory information from the inner ear to the brain.

Sounds enter our ear through the ear canal (outer ear). These sounds are amplified in the middle ear and then in the inner ear are converted into electrical stimuli to be transmitted along the nerve pathways up to the brain. These nerve pathways go from the inner ear to the brainstem (base of the brain) and then up to the cortex of the brain. By the time the nerve impulses reach the cortex of the brain, we have been able to attach meaning onto the sounds we have heard.

Central Auditory Processing allows us to make sense of auditorily presented material. It allows us to “screen” the important auditory information (e.g., teacher giving instructions in the classroom) from the irrelevant information (e.g., traffic noise).

Central Auditory Processing also allows us to realise the individual sounds in spoken words, and the sequence in which the sounds are organised. These skills are prerequisites for developing reading and spelling.

In fact Central Auditory Processing also allows us to have an intact auditory short-term memory. That is, the ability to store auditorily presented information in the working memory to analyse it, compare it and manipulate it.

Children who have Central Auditory Processing Difficulties typically find it difficult to process complex auditory information, particularly in the presence of background noise. This is particularly evident in the classroom. They can be expected to miss or misunderstand parts of conversation/instructions.

Because of the difficulty realising individual sounds in words, many children with Central Auditory Processing difficulties find learning to read and spell very difficult.

Remember – children who have C.A.P difficulties will often have normal hearing levels. That is, they can hear sounds, words etc. What they have difficulty with, is processing and making sense of these sounds, words and sentences.

An audiologist is the professional who tests for Central Auditory Processing difficulties.

Speech Pathologists usually see children with C.A.P difficulties due to the impact this disorder has on listening, comprehension and sound analysis.

If a child is diagnosed with Central Auditory Processing difficulties, certain considerations in the classroom need to be made. For example, sitting the child towards the front, reducing/eliminating background noise and avoiding open plan classrooms, providing extra visual cues and checking to see whether the child has received and understood verbally presented information are a few suggestions for making classroom life easier for children with Central Auditory Processing Difficulties.