

## CENTRAL AUDITORY PROCESSING:

Central Auditory Processing (CAP) difficulties does NOT mean your child can't hear. A child with CAP difficulties often has normal hearing.

When we hear any noise (e.g. speech and traffic), the sound goes through our outer ear (ear canal) and it is made louder as it passes through our middle ear. The sound then travels into our inner ear (cochlea).

What happens next, can be defined as CENTRAL AUDITORY PROCESSING.

After the sound leaves the inner ear, the Auditory Nerve carries the signal to the brain. By the time the signal has reached our brain, we have attached meaning to the sounds we heard.

Central Auditory Processing difficulties occur when there is a break down in this process.

CAP allows us to "make sense" of what we hear. It lets us ignore background noise and focus on what is important (e.g. instructions, lessons). CAP allows us to have an intact short-term memory (i.e. The ability to keep information in our memory long enough to analyse, compare and manipulate it). CAP also allows us to understand how spoken words can be broken up into individual sounds and the order in which sounds are organised. These skills are necessary for developing reading and spelling.

If a child has CAP difficulties, this may result in difficulties with learning new skills, following directions, understanding long and/or complex sentences. Children with poor auditory processing skills often find learning to read and spell very difficult also.

Therefore we can think of CAP as –

"How well the ear talks to the brain and how well the brain understand what the ear tells it."

An Audiologist is the professional who tests for CAP difficulties. Speech pathologists usually see children with CAP difficulties due to the significant negative effects this disorder can have on a child's listening, comprehension and reading and spelling.

### Reason for Assessment:

Recently I saw a little girl, Linda (aged 4 years 9 months) attending pre-school. She was advised to see a speech pathologist by her teacher as the teacher was concerned about her language comprehension because she found it difficult to sit on the mat and listen to a story. She was also concerned that when she asked her a question she would give an answer that had nothing to do with the question.

### Assessment:

When I tested Linda's language I found that she could only respond to a one-step command (e.g. "Give me the pen."). If I asked her to 'Give me the pen and the scissors.' it was as if she hadn't heard the second part of the instruction. I suspected that she had serious difficulties with her short-term auditory memory and referred her for a central auditory processing assessment.