



# SENSORY PROCESSING

## VESTIBULAR

### What is vestibular input?

Vestibular input is received in the brain every time we move, it is located in the inner ear and helps us detect change in regards to gravity, it helps identify if we are sitting, standing, lying down, upside down, spinning, standing still etc. Vestibular input is important because it links with our auditory, visual and proprioceptive sensory systems. Because of this it is important for our visual motor skills (hand eye coordination) and our body awareness.

### What do difficulties processing vestibular input look like?

When a child's sensory system is not processing vestibular input effectively, the following difficulties may be observed.

- Can't sit still /constantly on the move
- Poor core strength
- Poor balance
- Poor motor planning
- Poor organisational skills
- Poor attention
- Clumsiness
- Fearful of heights
- Does not like their feet off the ground
- Craves spinning or swinging

Some children love to seek additional vestibular input:

- Spins frequently
- Loves to climb high
- Seeks out swinging
- Rocking
- Never seems to get dizzy
- Always on the move

Some children will be sensitive to vestibular input:

This can also be known as gravitational insecurity

- Scared of movement
- Doesn't like climbing
- Doesn't like play ground equipment
- Avoids tipping head when picking things up
- Cautious when moving on stairs or between surfaces.

### What can we do?

In order to support a child we need to honour what their sensory system needs, if they are seeking additional input, then we need to give them appropriate ways to do so. If they are sensitive to vestibular input it is equally important not to force challenging activities, but increase tolerance slowly.

Vestibular Seekers:

- Play ground equipment such as monkey bars, swings, slides, merry go rounds and climbing frames.
- Sitting on a rocking chair
- Bouncing/rocking/rolling on a gym ball
- Swaying to music
- Row Row the boat- whilst rocking back and forth with a partner
- Spinning on a swivel chair or 'whizzy dizzy'. Spin one way and then the other for approximately 10 seconds. Spinning is intense sensory input, do not spin excessively as you risk sensory overload.
- Scooter board
- Being pulled in a cart/wagon
- Skipping
- Leap frog
- Balance beams
- Jumping on a trampoline
- Picking up items from the floor
- Head, shoulders, knees and toes with actions.

## Vestibular sensitivities:

- Introduce activities slowly and start with activities which keep the feet on the ground such as head, shoulders, knees and toes.
- Take small steps to reduce anxiety around a piece of equipment or activity.
- Keep hold of child when they are trying an activity they are unsure of such as swinging or jumping. Give deep pressure whilst keeping hold of their arms or waist to offer reassuring and grounding input.
- Walking through/over an uneven terrain obstacle course eg stepping stones, over boxes, benches, through tunnels, on cushions, bubble wrap (uneven surfaces)
- Balancing on balance boards
- Walking and running up ramps or benches at different heights
- Going up and down stairs and kerbs
- Rocking in a rocking chair
- Roll down a grassy hill
- Scooter boards sitting or lying on stomach