THE VESTIBULAR SENSORY SYSTEM (GRAVITY AND MOVEMENT)

Blossom
Children's Occupational Therapy

What is the Vestibular system?

- A sensory system which is located in the inner ear which plays a crucial role in maintaining balance, spatial orientation and coordinating movement. It works closely with the visual and proprioceptive sensory systems, helping the brain to understand the body`s position and movement in space.
- Types of movement to consider:

1. Linear (backwards and forwards, side to side and up and down) - tends to be calming / organising
2. Rotary movements i.e. going around and around - can be alerting for some

What are the functions of this system?

- Postural control / stability
- Balance
- Bilateral coordination
- Gravity and movement
- Ocular Motor Skills
- Sequencing
- Spatial awareness
- Gravitational security
- Visual processing and visual motor skills
- Construction
- Discriminating body position and movement

What to look out for

Over-responsive vestibular system:

Shows distress when their head is tilted in space

Fearful of playground equipment i.e. swings and climbing

Fearful of heights or climbing stairs

Avoids balance activities
Avoids PE

Become dizzy or nauseous in response to movement i.e. car sickness

Under-responsive vestibular system:

Difficulties coordinating both sides of the body

Confused by directions or instructions

Does not notice when motion begins or stops

Seeks movement, always on the go and cannot keep still

Activtiy suggestions to help

For those who are seeking movement opportunities:

- Bouncing
- Spinning - please note, apply caution with rotation due to it`s overstimulating effect, which can last several hours
- Climbing centres / playground / park equipment
- Jumping games / trampoline
- Slides
- Walking, running, hiking, swimming
- Ball skills
- Balance activities i.e. Stepping stones / Balance beams
- Scooter board activities

For those who are sensitive to movement sensations:

- slow, rhythmical swinging
- Walking on uneven surfaces
- Gentle movement using rocking chairs
- Gentle rocking back and forth on a gym ball / seated bouncing
- For those who are particularly sensitive to movement sensations, please seek advice from a qualified OT with training in Sensory Integration