



Sensory Concepts

# Vestibular System - Our Movement Sense

Our vestibular system is one of the many systems which help us to take in sensory information from the world around us (and within us) to help us engage with the world, develop skills and regulate our behaviours and emotions. It has strong links to many other sensory systems and is one of the first to develop in the growing baby.

It is all about movement. It tells us if we are moving...how fast...what about things around us...are they moving? It helps us with balance and controlling our eyes for tracking.

## Receptors for the vestibular system:

These are located in our inner ear and therefore this system is not only linked to balance, but also to our sense of hearing.

Children will often make more noises and talk more readily when they are moving (think about kids in the pool, on the trampoline, bouncing on gym ball) Being a movement sense – it is also strongly linked to our awareness of how our body is moving and where our body parts are in relation to our self and others (proprioception)

## When a child feels too much:

Over reaction to Vestibular input – can mean that a child may avoid different types of movement. They may be fearful or cautious if their feet leave the ground. They may have taken longer to master using steps or riding a bike and may prefer to run around the playground rather than climb on it. They may dislike washing their hair because tilting their head can be disorientating. Challenges can often arise in relation to the development of motor skills.

## When a child feels too little:

Being under responsive to vestibular input often means that a child will seek movement opportunities. They may find it difficult to sit still and appear to be always “on the go”. The benefit from movement input to assist their nervous system in feeling balanced and well regulated, however this can impact upon focus and attention.

Often our “movers and shakers” will develop good superficial motor skills, however may also not lay

Strong foundations for skills relating to balance or controlled coordinated movements. They may have little awareness of risks associated with movements such as climbing.

## Input through our vestibular system can assist a sensory child to feel more settled and regulated.

Linear movements can be calming

- Rocking / swinging / sliding / scooting

Unpredictable movements or rotations can be alerting

- Jumping / chasing / wrestling

(see our information sheet about different vestibular play options)

## Watch out for overload of vestibular inputs:

Children may need assistance to calm and centre themselves if they become too overwhelmed with movement inputs. Take is gently when introducing vestibular play, especially if you know your child can be over reactive to vestibular inputs. Cuddle them close and provide deep pressure if you note a short shallow breaths, drowsiness, glazed eyes, nausea or vomiting.

## Vestibular based play:

This is an important part of development – to provide the just right balance of movement input to assist children in developing the pathways in their nervous system which support the development of motor skills and assist with the regulation of behaviours.

