

Vestibular Sensory Processing in your child

What we can do as parents and guardians

What is it?

The inner ear and brain are what make up the vestibular system. These parts of the body are affected by movement, making the vestibular system responsible for receiving information, known as input, as the body moves through its environment. The body gets information from head movement and gravity to maintain balance, equilibrium, and movement. In children, vestibular movement can include running, jumping, swinging, or spinning.

A sense of physical stability in from the body can affect mental stability such as emotional security and confidence. Unbalanced vestibular input can make the body feel unbalanced. Making the child feel insecure and unsafe.

The difference between hyperresponsive and hyporesponsive

Hyperresponsive and hyporesponsive are based off the sensitivity of the input the child is getting, whether they are hypersensitive and hyposensitive.



If your child is hyporesponsive to vestibular input, your child is be able to tolerate a lot of movement before it registers. Causing the body to want to be in constant motion.

If your child is hyperresponsive to the vestibular input they are receiving they might not be able to handle movement at all. This can cause the child to avoid activities that challenge their balance and coordination.



Signs to look for in your child

Hypersensitivity behaviors

- Car/motion sickness
- Doesn't like movement (swings, slides, rollercoasters)
- Avoid having the head be upside down/tipped backward (hair washing or getting diaper changed)
- Appear to be clumsy or unsteady
- Low muscle tone

Hyporesponsive behaviors

- Always spinning, moving, running, fidgeting
- Running away
- Risky behavior
- May be impulsive
- Always enjoys being upside down
- Headbanging, shaking or hitting





Why exercising the vestibular system is good and how we can do it

The vestibular system is activated with head position changes. Activating your vestibular system in a routine and safe way can help you gain your balance, spatial awareness, and muscle response. All to prevent injury and allow your child to become more confident in playtime while being aware of their surroundings.

It is good to activate the vestibular system in the morning to awaken and alert the body. This is the best way to warm up the bodies nervous system and kickstart a good day for your child. The activities listed below and to the right are great ways to help your child's growth and development.

At home exercises, no equipment needed



Jumping jacks

Or jumping in general, can practice vertical vestibular input. Gaining a sense of balance with their body.

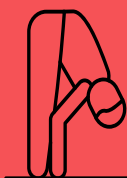
Log rolling

This activity can help practice their spatial awareness.



Toe touches

These activities can practice their balance as well as spatial awareness. Keeping the head in parallel with their shoulders will move the inner ear activating your vestibular input.



Sparky's vestibular sensory sack!

We have a few tools with activities to activate the vestibular system to set up your child for success! All included in the sensory sack!

- **Jump rope (weighted or cordless)**
 - Helps to alert their verticle vestibular input, gaining balance.
- **Cones**
 - Setting up an obstacle course using these cones is a lot like hopscotch where your child practices their reflexes and spatial awareness.
- **Exercise ball**
 - Having your child lay on their stomach and back on the therapy ball will allow your child to practice their balance as they come from being upright to upside down stimulating your vestibular system.
- **Laminated vestibular exercise sheet**
 - More exercises with more in-depth explanations



The Vestibular Sparky sensory sack can be purchased at Spark2Hope.org!



All proceeds will go to fund future Sparky sensory sacks!