THRIVE: PRACTICAL INSIGHTS ON PEDIATRIC DEVELOPMENT

Making Sense of Sensory Processing

BALANCE AND PROPRIOCEPTION

c&fd

Ever know a child who seems to fall, trip and bump into things more than peers?

Many skills must be in place to support good balance and proprioception. Adequate sensory processing skills, range of motion, and strength are foundational skills required for balance and knowing where you are in space.

Sensory Processing & Proprioception

THE VESTIBULAR SYSTEM:

Tells us where our heads and bodies are in relation to the surface of the earth

Tells us whether we are moving or standing still and whether objects are moving or motionless in relation to our body

Tells us about the direction in which we are moving and how fast we are moving

Lays a foundation for visual input

Without good information coming from the vestibular system, sights and sounds in the environment don't make sense

THE VISUAL SYSTEM:

Our eyes should work together in a teamed fashion with smooth movements to scan our environment and notice how close or far things are from our body to help us maneuver through space.

THE PROPRIOCEPTIVE SYSTEM:

Proprioceptive input receptors are in the muscles and joints and give information to the brain about the amount of stretch in each muscle and pressure on each joint.

This provides an accurate picture of the body's position in space without the use of vision.

Proprioception provides feedback for grading muscle movements and for how much force is needed to interact with an object or person in the environment.

Balance

BALANCE EXPECTATIONS BY AGE:

3 year old - balance on 1 foot for 3 seconds, use alternating feet when climbing stairs

4 year old - hop on 1 foot

5 year old - balance on 1 foot for 10 seconds

RED FLAGS FOR BALANCE DIFFICULTIES

Child trips/falls/bumps into things often

Child who is fearful of movement

Child who seeks out movement

Child who appears to have good balance while moving, but poor balance when expected to stay still

Child who has difficulty moving through dynamic environments

Child who has difficulty walking across different or dynamic surfaces

HOW DO THESE SYSTEMS WORK TOGETHER?

Information from these body systems is processed and combined in order for a person to adapt and react to a changing environment.

HAVE A CONCERN? CALL CHILD & FAMILY DEVELOPMENT TO SCHEDULE A FREE PHONE INTAKE!

Contact an occupational therapist or physical therapist for a standardized assessment of motor and sensory skills. Treatment for balance difficulties can include:

Sensory Integration

Core/Postural Strengthening

Postural Control and Stability Training

Balance Strategies Training

Visual-Motor Exercises

Oculomotor Training

Therapeutic Listening ®