

Incorporating Functional Tasks into your Lesson Plan.

An Occupational Therapist's perspective to therapeutic riding.





Presented By
Klara Jean Bergtholdt
MPA, OTR/L, CLT-LANA, CHT, CTRI

Role at Happy Trails

- Occupational Therapist
- Riding Instructor
- Consult with other riding instructors
- Give individual EAT classes
- Give Group Classes focused on Life Skills.





Diagnosis we work with:

➤ Primary Diagnosis

- Autism
- Cerebral Palsy
- Down's Syndrome
- Williams Syndrome
- Angelman's
- Traumatic Brain Injuries
- Chromosomal Abnormalities

➤ Secondary Diagnosis

- Anxiety
- ADHD
- Sensory Processing Disorder

8 Senses



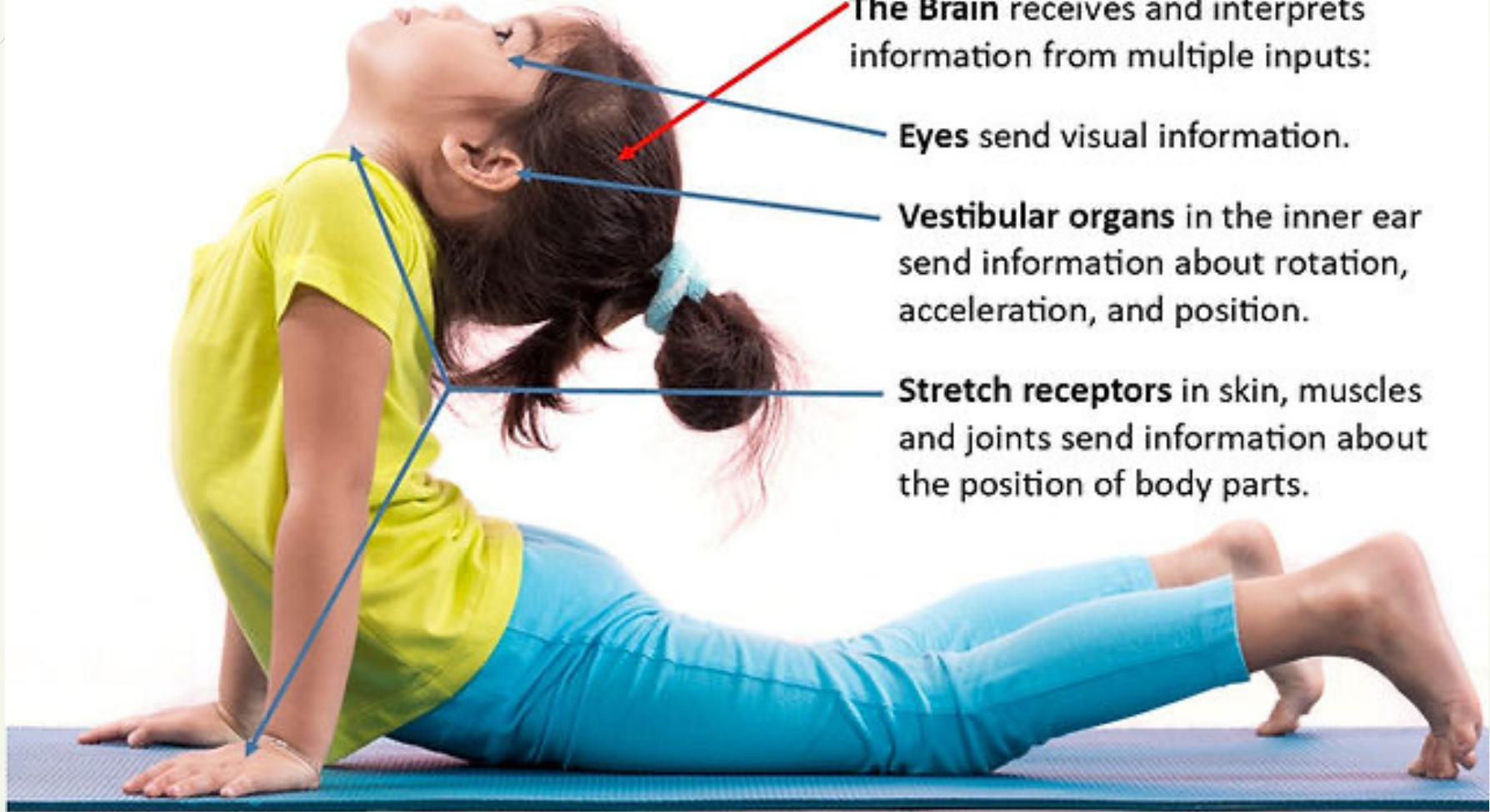
Proprioception

The Brain receives and interprets information from multiple inputs:

Eyes send visual information.

Vestibular organs in the inner ear send information about rotation, acceleration, and position.

Stretch receptors in skin, muscles and joints send information about the position of body parts.

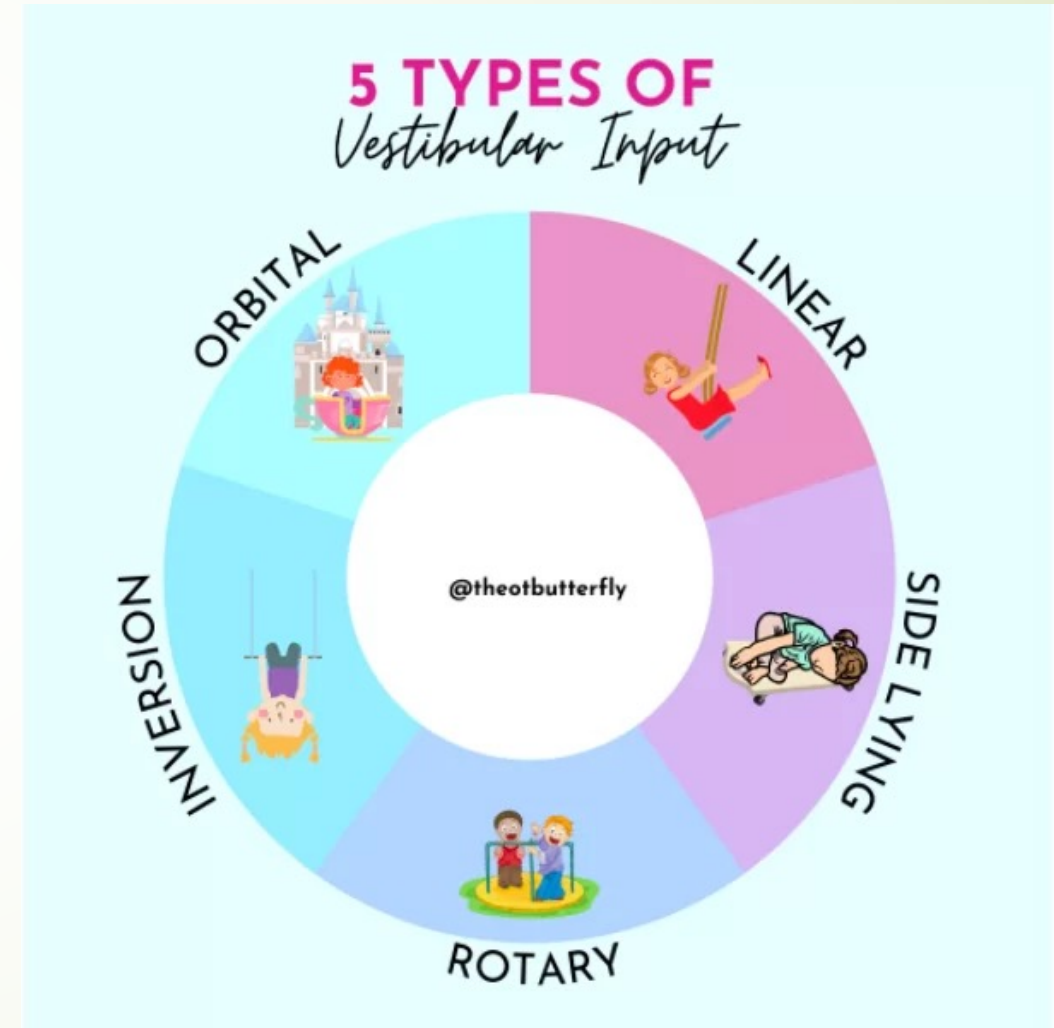
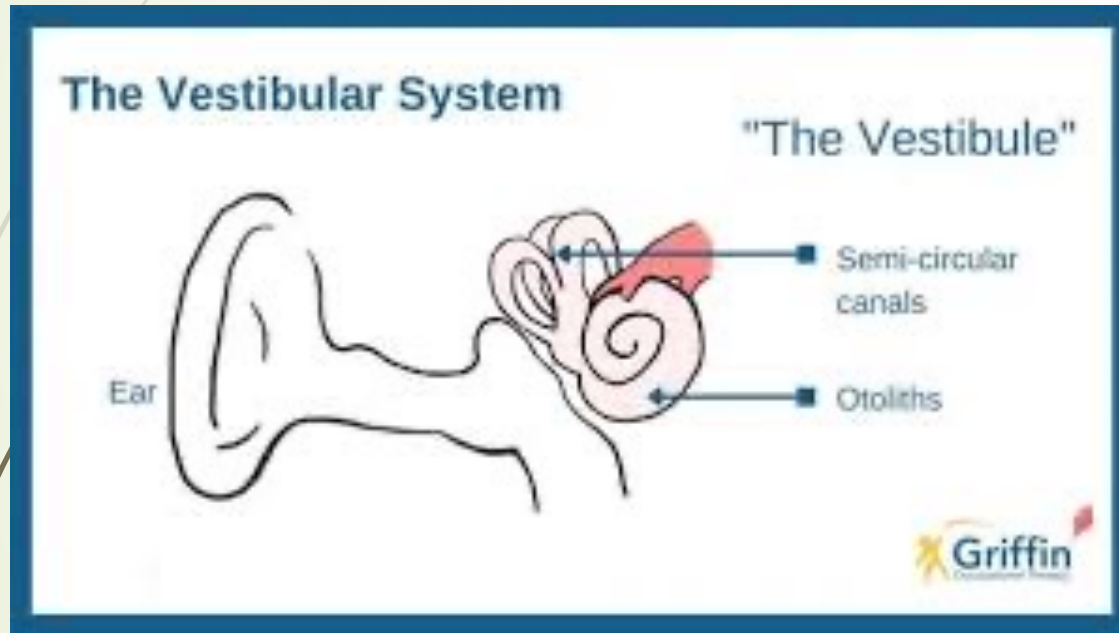




Proprioception

- ▶ Why is it important:
 - ✓ Tells us where we are in space
 - ✓ Grades are movement
 - ✓ Helps us maintain balance

Vestibular





Vestibular

- ▶ Why is it important
 - ✓ It keeps us balanced
 - ✓ Helps us sit upright and stand upright
 - ✓ Helps us walking
 - ✓ Changing positions challenges our vestibular system



What is Interoception?

Provides us with information about our body and emotional states

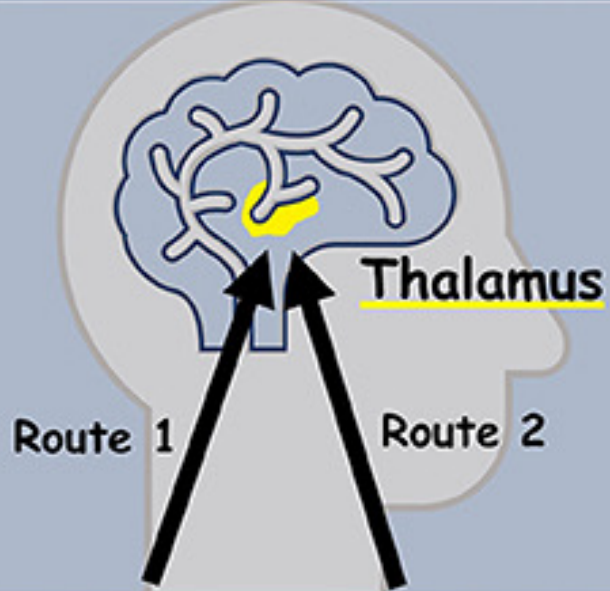
➤ **Body States**

- Pain
- Hunger
- Thirst
- Toileting Needs
- Fatigue

➤ **Emotion States**

- Anxiety
- Anger
- Sadness
- Joy
- Excitement
- Irritability
- Fear

2. The Thalamus passes this information to the Insula



1. Signals from the body are sent to the Thalamus

Cell
(detecting pain)



Cell
(detecting heart beat)



Insula Busy Working
Do Not Disturb



3. The Insula sends a message about your body sensations to you

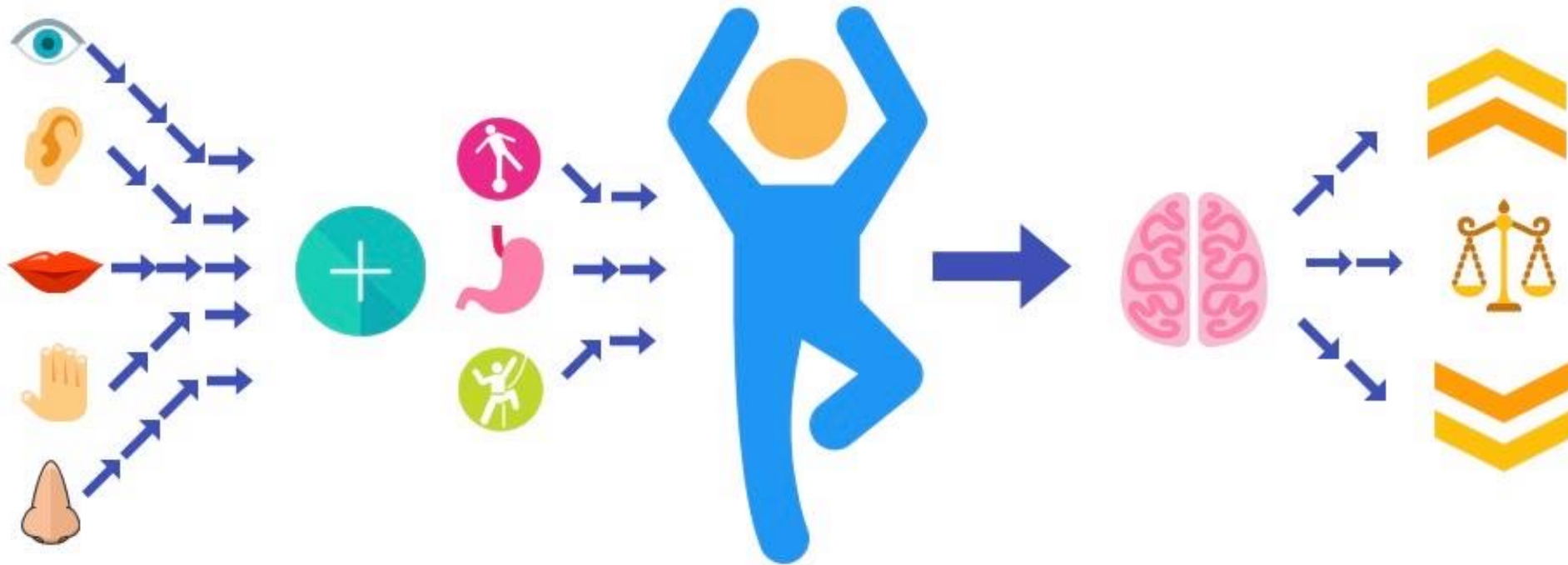
Ouch!
A thorn! That
really hurt!



I'm really
nervous about
this speech...my
heart is beating
really fast!



What is SPD?



1. External stimuli (visual/sight, auditory/sound, olfactory/smell, tactile/touch, and gustatory/taste) enter the body through sensory receptors.

2. Internal stimuli (proprioceptive/movement and position in space, vestibular/balance, interoceptive/awareness of internal organ needs) activate the peripheral nerves.

3. External and internal sensory input travels to the brain and is processed as either over-arousal, under-arousal, or neutral information.

4. Input that our brains process as over-arousal, register in our bodies as a hypersensitivity. Hypersensitivity can present as fear, avoidance, distraction, or poor balance.

5. Input that our brains process as under-arousal, register in our bodies as hyposensitivity. Hyposensitivity can present as overly touchy, close proximity to others, an inability to sit still, thrill-seeking, or clumsiness.

6. Input processed as neutral information do not present in our bodies as problematic behaviors. SPD arises when the hyper- or hypo- sensitivity to sensory input causes dysfunction in the person's daily life. Every person with SPD can experience a different combination of sensory challenges.



Riding requires what skills?

Right and Left

Endurance

Balance

Fine motor control

Volume Control

Timing

Range of motion

Body Parts

Body awareness

Body Parts

Eye hand coordination

Knowing letters

Tool use

Strength

Know colors

Reading emotions

Knowing numbers

Ground Activities



Emotions





Decorating/Dressing



Shapes



Numbers/Counting



Reaching tasks/Colors




Puzzles





Other functional Tasks

- 
- Beads and String
 - Scavenger Hunt
 - Planting and Watering Plants
 - First Aid
 - Inside/Outside
 - Right and Left
 - Making Treats
 - Read a book



Questions?

THANK YOU

